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PUBLICATIONS

OF THE

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1908

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HAND BOOK

OF THE
AMERICAN ECONOMIC ASSOCIATION

1908

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AMERICAN ECONOMIC ASSOCIATION.

The American Economic Association is an organization composed of persons interested in the study of political economy or the economic phases of political and social questions. As may be seen by examining the list of members and subscribers printed in this volume, not only are all universities and most prominent colleges in the country represented in the Association by their teachers of political economy and related subjects, but even a larger number of members come from those interested as business men, journalists, lawyers or politicians in the theories of political economy or, more often, in their applications to social life. There are further nearly two hundred subscribers, including the most important libraries of this country. The Association has besides a growing representation in foreign countries.

The first two meetings of the Economic Association in 1885 and 1887, and the meetings of 1897, 1898, 1900, 1901, 1902, 1903, 1904, 1905, 1906, and 1907, were at the same place as those of the American Historical Association, and in the last three years the American Political Science Association met with the other two Associations. Joint sessions and less formal gatherings of the members of the Associations were thus held. In 1908 the meeting will be held in Atlantic City. The annual meetings give opportunity for social intercourse; they contribute to create and cement acquaintanceship and friendship between teachers of economics and cognate subjects in different institutions, as well as to bring into touch with each other students and business men interested in the social and economic problems of the day. The meetings aim to counteract any tendency to particularism which the geographical separation and the diverse interests might be deemed to foster.

The Publications of the Association, a complete list of which is printed at the end of this volume, were begun in March, 1886. The first series of eleven volumes was completed by a general index in 1897. The second series, comprising two volumes, was published in 1897-99, and in addition thereto the Association issued during 1896-99, four volumes of Economic Studies. In 1900, a third series of quarterly Publications was begun with the Papers and Proceedings of the Twelfth Annual Meeting, and has been continued since with ample amount and variety of matter. It is intended to add to these quarterly numbers, from time to time, such monographic supplements as the condition of the treasury and the supply of suitable manuscript may make possible. A Bulletin of bibliography and current notes has been authorized and will be published during the current year.

The American Economic Association is the organ of no party, sect or institution. It has no creed. Persons of all shades of economic opinions are found among its members, and widely different views are given a hearing in its annual meetings and through its publications.

The officers of the Association and the contributors to its publications receive no pay for their services. Its entire receipts are expended for the printing and circulation of the publications and for the annual meetings. Any member, therefore, may regard his annual dues either as a subscription to an economic publication, a payment for membership in a scientific association, or a contribution to a publication fund for aiding the publication of valuable manuscript that might not be accepted by a publishing house governed primarily by motives of profit, and that could not be published by the writer without incurring too heavy a burden of expense.

CONSTITUTION OF THE AMERICAN ECONOMIC ASSOCIATION

(AS REVISED AT THE ANNUAL MEETING, DEC., 1905.)

ARTICLE I.

NAME.

This Society shall be known as the AMERICAN ECONOMIC ASSOCIATION.

ARTICLE II.

OBJECTS.

1. The encouragement of economic research, especially the historical and statistical study of the actual conditions of industrial life.
2. The issue of publications on economic subjects.
3. The encouragement of perfect freedom of economic discussion. The Association as such will take no partisan attitude, nor will it commit its members to any position on practical economic questions.

ARTICLE III.

MEMBERSHIP

1. Any person interested in economic inquiry may, on the nomination of a member, be enrolled in this Association by paying three dollars, and after the first year may continue a member by paying an annual fee of three dollars.
2. On payment of fifty dollars any person may become a life member, exempt from annual dues.

3. Foreign economists of distinction, not exceeding twenty-five in number, may be elected honorary members of the Association.

4. Every member is entitled to receive, as they appear, all reports and publications of the Association.

ARTICLE IV.

OFFICERS.

The officers of the Association shall be elected at the annual meeting and shall consist of a President, three Vice-Presidents, a Secretary, and a Treasurer, whose term of office shall be one year; six members of the Publication Committee and six elected members of the Executive Committee whose term of office shall be three years, and who shall be so classed that the term of two members of each committee shall expire each year; provided that the office of Secretary and that of Treasurer may be filled by the same person. The Executive Committee shall consist of the President, the Vice-Presidents, the Secretary, the Treasurer, the Chairman of the Publication Committee, the Ex-Presidents, and six elected members.

ARTICLE V.

DUTIES OF OFFICERS.

1. The President of the Association shall preside at all meetings of the Association and of the Executive Committee and, in consultation with the Executive Committee, shall prepare the programs for the annual meetings. In case of his disability, his duties shall devolve upon the Vice-Presidents in the order of their election, upon the Secretary and upon the Treasurer.

2. The Secretary shall keep the records of the Association and perform such other duties as the Executive Committee may assign to him.

3. The Treasurer shall receive and have the custody of the funds of the Association, subject to the rules of the Executive Committee.

4. The Executive Committee shall have charge of the general interests of the Association in the interval between annual meetings. It may fill vacancies in the list of officers, and may adopt any rules or regulations for the conduct of its business not inconsistent with this constitution or with rules adopted at the annual meetings. It shall act as a committee on time and place of meeting, and perform such other duties as the Association shall delegate to it. A quorum shall consist of five members, other than the Vice-Presidents and the Ex-Presidents.

5. The Publication Committee shall have charge of the publications of the Association.

ARTICLE VI.

AMENDMENTS.

Amendments, after having been approved by a majority of the Executive Committee, may be adopted by a majority vote of the members present at any regular meeting of the Association.

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THE TWENTIETH ANNUAL MEETING.

The Twentieth Annual Meeting of the American Economic Association was held at Madison, Wisconsin, December 28-31, 1907, under the auspices of the University of Wisconsin. The American Historical Association, the American Political Science Association, the American Sociological Society, the American Society for Labor Legislation, and the Mississippi Valley Historical Association met at the same time and place. The American Economic Association held three joint sessions, one with the American Sociological Society, on Saturday evening, Dec. 28; the second with the American Association for Labor Legislation, on Monday morning, Dec. 30; the third with the American Political Science Association, Tuesday morning, Dec. 31.

The following names were entered on the register of the Economic Association, and there were others in attendance who failed to register.

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Cance, A. E., Madison, Wis.

Carlton, Frank T., Albion, Mich.

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- Halsey, John J., Lake Forest, Ill.
 Hammond, M. B., Columbus, Ohio.
 Hancock, G. D., Madison, Wis.
 Haney, L. H., Iowa City, Iowa.
 Havighorst, F. A., Appleton, Wis.
 Hatten, W. H., New London, Wis.
 Hayes, E. C., Univ. of Illinois, Urbana, Ill.
 Henderson, C. R., Univ. of Chicago, Chicago, Ill.
 Hess, R. H., Madison, Wis.
 Hibbard, B. H., Ames, Iowa.
 Hill, Wm., 5728 Madison Ave., Chicago, Ill.
 Hollander, Jacob H., Baltimore, Md.
 Horack, L. E., U. of Iowa, 222 Bloomington St., Iowa
 City, Iowa.
 Hotchkiss, W. E., Chicago, Ill.
 Howard, Earl, Dean Northwestern Univ., Evanston,
 Ill.
 Hoxie, R. F., Chicago, Ill.
 Jenks, J. W., Ithaca, New York.
 Jones, E. D., Ann Arbor, Mich.
 Johnson, A. S., Lincoln, Neb.
 Judson, Frederick N., St. Louis, Mo.
 Justi, Herman, Chicago, Ill.
 Kime, Virgil M., Ann Arbor, Mich.
 Kinsman, D. O., Whitewater, Wis.
 Kirk, Wm., Providence, Rhode Island.
 Knight, G. W., Columbus, Ohio.
 Laughlin, J. Lawrence, Univ. of Chicago, Chicago, Ill.
 Liefman, Rob't, Freiburg i. Baden, Ger.
 Loos, Isaac A., Iowa City, Iowa.
 Lough, W. H. Jr., New York City.
 McCormick, S. B., Pittsburg, Pa.
 McCrea, Roswell C., New York City.
 MacGill, Caroline E., Rockford College, Rockford, Me.
 McKittrick, R., Madison, Wis.

- McVey, Frank L., Minneapolis, Minn.
 Meyer, B. H., 1937 Arlington Place, Madison, Wis.
 Millet, P. H., 137 West 58th St., New York City.
 Millican, Alfred C., Greenville, Ill.
 Moore, Frederick W., Nashville, Tenn.
 Mussey, H. R., University of Pennsylvania.
 Osborne, Thos. M., Auburn, N. Y.
 Parker, Edward C., Asst. Agr. Minn. Exp. Sta., 1272
 County Road, St. Paul, Minn.
 Parish, I. W., Cedar Falls, Iowa.
 Patton, Eugene B., Rochester N. Y.
 Peck, W. C., Washington, D. C., U. S. Dept. of Agri.
 Plehn, Carl C., 2300 Waring St., Berkeley, Cal.
 Phelan, Raymond V., U. of Minn. Minneapolis, Minn.
 Phillips, John B., Univ. of Col., Boulder, Col.
 Price, W. H., Madison, Wis.
 Putnam, J. W., Columbia, Mo.
 Robinson, E. D., Univ. of Minn., 1213 Seventh St.,
 S. E., Minneapolis City, Minn.
 Robinson, Maurice, Urbana, Ill.
 Ryan, John A., St. Paul Seminary, St. Paul, Minn.
 Sanborn, John B., Madison, Wis.
 Seager, H. R., New York City.
 Smalley, Harrison S., Ann Arbor, Mich.
 Smith, J. Allen, 4533 15th Ave., N. E. Seattle, Wash.
 Spencer, C. W., Princeton, N. J.
 Stephens, H. Morse, Univ. of Cal., Berkeley, Cal.
 Sumner, Helen L., Denver, Col.
 Taylor, A. W., Madison, Wis.
 Taylor, Graham, 180 Grand Ave., Chicago, Ill.
 Taylor, Henry C., Univ. of Wisconsin, Madison, Wis.
 Thompson, John J., Urbana, Ill.
 Todd, Edwin S., Oxford, Ohio.
 Towne, E. T., Northfield, Mass.
 Tuttle, Chas. A., Crawsfordville, Ind.

Urdahl, T. K., Lexington, Va.
 Veditz, C. W. A., Washington, D. C.
 Vickers, E. H., 2 Nichome, Mita, Shiba, Tokyo, Japan.
 Virtue, G. V., Winona Normal, Winona, Minn.
 Weatherly, U. G., U. of Indiana, Bloomington, Ind.
 Weston, N. A., Champaign, Ill.
 White, Peter, Marquette, Mich.
 Willcox, W. F., Ithaca, N. Y.
 Wildman, W. S., Columbia, Mo.
 Willoughby, W. W., Baltimore, Md.
 Wilgus, J. A., Platteville, Wis.
 Wood, Stuart, Philadelphia, Pa.
 Wolfe, A. B., Oberlin, Ohio.
 Wright, C. W., 39 Hitchcock Hall, Univ. of Chicago,
 Chicago, Ill.
 Wyckoff, G. P., Grinnell, Iowa.
 Young, F. G., Univ. of Oregon, Eugene, Ore.

PROGRAM.

First Session—Saturday, December 28, 10 A. M.

ECONOMIC THEORY.

North Museum Hall, State Historical Library Building.

Are Savings Income? IRVING FISHER, Yale University.

Discussion by WINTHROP M. DANIELS, Princeton University; FRANK
 A. FETTER, Cornell University; FRED M. TAYLOR, Michigan
 University; HERBERT J. DAVENPORT, Chicago University;
 ROBERT LIEFMANN, University of Freiburg, i. B.

General Discussion.

12M. Business Meeting. Appointment of Committees.

Saturday Afternoon, December 28, 2 P M.

ROUND TABLE MEETINGS.

Room 125, Library Building.

1. Agricultural Economics. Chairman, THOMAS N. CARVER, Harvard University.

Discussion opened by KENYON L. BUTTERFIELD, Massachusetts Agricultural College, Amherst, Mass.; L. G. POWERS, Census Office, Washington, D. C.; HENRY C. TAYLOR, University of Wisconsin, Madison; R. P. TEELE, U. S. Dept. of Agriculture; F. W. BLACKMAR, University of Kansas; JOHN G. THOMPSON, University of Illinois.

Lecture Room, Library Building.

2. Transportation: The Basis of Reasonable Railway Rates. Chairman, BALTHASAR H. MEYER, University of Wisconsin.
Discussion opened by HALFORD ERICKSON, Railroad Commission of Wisconsin; HARRISON S. SMALLEY, University of Michigan.

At 4 P. M.

South Museum Hall, Library Building.

3. Money and Banking: The asset currency plan of the American Bankers' Association. Chairman, DAVIS R. DEWEY, Massachusetts Institute of Technology.
Discussion opened by WILLIAM A. SCOTT, University of Wisconsin; JOSEPH CHAPMAN, Jr., Minneapolis.

Lecture Room, Library Building.

4. Agreements in Political Economy. Chairman, C. B. FILLBROW, Boston.
Discussion opened by JACOB H. HOLLANDER, Johns Hopkins University; and THOMAS N. CARVER, Harvard University.

Third Session—Saturday Evening, December 28, 8 P. M.

JOINT SESSION WITH AMERICAN SOCIOLOGICAL SOCIETY.

Room 165, University Hall.

HON. WILLIAM F. VILAS, Presiding.

Annual Address: The Principles of Government Control of Business: JEREMIAH W. JENKS, President of the American Economic Association.

Annual Address: Social Classes in the Light of Modern Sociological Theory. LESTER F. WARD, President of the American Sociological Society.

*Fourth Session—Monday, December 30, 10 A. M.***JOINT SESSION WITH AMERICAN ASSOCIATION FOR LABOR LEGISLATION.**

Room 165, University Hall.

1. Annual Address: Economic Theory and Labor Legislation.
RICHARD T. ELY, President of the American Association for Labor Legislation.
2. The Normal Work Done in Coal Mines. Paper by THOMAS K. URDAHL, Washington and Lee University.
Discussion led by United States Labor Commissioner NEILL.
3. Workmen's Insurance in Illinois. Paper by CHARLES R. HENDERSON, University of Chicago.
Discussion by JOHN R. COMMONS, University of Wisconsin;
MAX O. LORENZ, University of Wisconsin.

Until 4.30 p. m. there was no separate session of the American Economic Association, but at 2.30 there was a meeting of the American Association for Labor Legislation, South Museum Hall, Library Building, with the following program:

- (1). A program for Social Legislation with Especial Reference to the Wage-Earner. Opened by HENRY R. SEAGER, Columbia University.
 - (2). Council Meeting A. A. L. L. Submission of Reports as follows: (as requested by the International Association.)
 - a. Administration of Labor Laws in the United States. HENRY R. SEAGER, Columbia University.
 - b. Employment of Children and Women. U. S. Commissioner NEILL.
Election of Officers of A. A. L. L. and general meeting of members.
- 4.30 P. M. Business Meeting of American Economic Association.
Election of Officers. South Museum Hall, Library Building.

Fifth Session—Monday, December 30, 8 P. M.

Lecture Room, Library Building.

The Relation of the Federal Treasury to the Money Market: HON. LYMAN J. GAGE, New York City.
Discussion by A. PRATT ANDREW, Harvard University; DAVID KINLEY, University of Illinois.
General Discussion.

Sixth Session—Tuesday, December 31, 10 A. M.

JOINT SESSION WITH THE AMERICAN POLITICAL SCIENCE ASSOCIATION.

Lecture Room, Library Building.

Public Service Commissions: SENATOR WILLIAM H. HATTON, New London, Wisconsin; HON. THOMAS M. OSBORNE, Auburn, Member New York State Public Service Commission.

Discussion by SENATOR GEORGE B. HUDNALL, Superior, Wisconsin; JOHN H. GRAY, University of Minnesota.

General Discussion.

BUSINESS MEETING AT MADISON, WIS.

DECEMBER 28, 1907.

The Association met in North Museum Hall, State Historical Library Building, at 12 M., at the close of the first session. The Association was called to order by the President. The report of the Secretary was then read:

REPORT OF THE SECRETARY TO THE AMERICAN ECONOMIC ASSOCIATION.

DECEMBER 28, 1907.

The Executive Committee of the Association held its regular Spring meeting in New York City, on March 25, 1907. The proposed appointment of a joint committee on Child Labor in conjunction with other Associations, notably the National Child Labor Association, was deemed under the circumstances, inadvisable. At the invitation of the National Arbitration and Peace Congress, a committee of five was appointed to represent the American Economic Association at the sessions of the National

Arbitration and Peace Congress. The committee consisted of Professors Jenks, Seligman, Taussig, Farnam, and Ely. At the meeting of the Executive Committee in March, Professor Veditz, Editor of the proposed Quarterly Bulletin, was present by invitation, and reported concerning the delays incident upon securing associate editors, books for review, etc. The report was referred to the Special Committee on the Bulletin. At the request of the Bibliographical Society of America, a committee was appointed to co-operate in the compilation of a bibliography of the Social Sciences. The President appointed Professors Fetter, Hollander, and Veditz as this committee.

The regular Fall meeting of the Executive Committee was held in New York, November 29, 1907. The Treasurer was directed to invest about Three Thousand Dollars (\$3000.00) of the surplus funds of the Association in some prime security, to yield about four per cent. per annum. The committee on the Bulletin reported through Professor Fetter. It was moved that the matter of reorganizing the publication activity of the Association be referred to a committee, to report at Madison, Wisconsin. Professor Fetter, Professor Hollander and the Secretary were constituted such committee. To this committee was also referred the matter of publishing a general index of the Society's Publications. The matter of possible co-operation between the Economic Association and the American Statistical Association was referred to President Jenks for investigation and report at Madison.

Invitations have been received from Richmond, Virginia, Cincinnati, Ohio and Atlantic City, New Jersey, each city extending its hospitality for the annual meeting of our Association in 1908.

The Association issued its four quarterly numbers

during the current year (the fourth number having been mailed during the third week of December). The Association also issued under separate cover, its Yearly Handbook, containing a list of members and subscribers, the proceedings at the business meetings at Providence, and the list of Doctoral Dissertations in Political Economy in Progress in American Universities and Colleges, January 1, 1907. It also issued a reprint of No. 3, Vol. VII, which was Dr. Gryzanovski's monograph on Collective Phenomena and the Scientific Value of Statistical Data. The reason for this reprint was the number of typographical errors in the original edition. A rigid recension of our membership rolls seems to make our total number of members and subscribers, December 19, 1907, to amount to 1002.

Members in arrears for five years or longer have been dropped from the rolls.

Among the serious losses in our honorary members which we have suffered during the past year may be mentioned the death of Professor John Kells Ingram, formerly of Trinity College, Dublin.

The Secretary desires publicly to record his obligations to Professor E. L. Bogart, acting Secretary during the absence of the Secretary.

Respectfully submitted,

W. M. DANIELS,
Secretary.

The report was, on motion, accepted and approved.

The report of the Treasurer was read:

W. M. DANIELS, TREASURER, IN ACCOUNT WITH THE AMERICAN ECONOMIC ASSOCIATION, FROM DECEMBER 24, 1906 TO DECEMBER 20, 1907.

Debits.

Cash on hand date of last report.....	\$4,676 82
Sales and Subscriptions:	
Through The Macmillan Co.....	\$796 67
Through Secretary's office.....	218 87
Reprints	11 30
Life Members.....	50 00
Annual Dues.....	1,842 60
Interest	208 54
	<hr/>
Total current receipts.....	3,127 98

Credits.

Expenses of Publication.....	\$1,531 25
Expenses of Secretary and Treasurer	1,084 33
	<hr/>
Total current expenses.....	\$2,615 58
(Investment excepted)	
Investment (Cost)	3,119 63
Cash bank balance.....	2,069 59
	<hr/>
	\$7,804 80 \$7,804 80

The total cash and invested funds (cost price) amount on December 20, 1907, to \$5189.22. The increase in funds and cash over the amount on hand at the date of the last report is \$512.40. Against this increase should be off-set the amount of about \$360.00 due after January 1, 1908, for printing and mailing No. 4 of the current Publications. It is believed, that with this exception, no other bills of any amount are outstanding and unpaid.

The attention of the Association is called to the steadily declining revenue accruing from the payment of annual membership dues. For the last four years the receipts from this source run as follows:

1904.....	\$2,340 00
1905.....	2,225 75
1906.....	2,088 59
1907.....	1,842 60

This implies that for the last three years there have been, on the average, over fifty members per year who have ceased paying membership dues. This decrease has not been due to failure on the part of the Treasurer's office to notify members in arrears of their respective arrearages. Accounts have been repeatedly rendered, and in case of considerable arrearages letters have been written and sent to the delinquents. So far as one can guess, one cause of this decline in paying membership has been the multiplication of other organizations whose aims are partly similar to those of our own. Another cause has doubtless been the paring down of individual budgets of those on fixed salaries during the recent period of increased living expenses.

In the matter of investments, whereas the Association a year ago had at interest partly with the Lincoln Trust Company, of New York City, and partly with the First National Bank, of Ithaca, New York, \$4000.00 at $3\frac{1}{2}$ per cent. per annum, at the present time the invested funds of the Society are represented by \$3000, par value, in New York City bonds payable in 1917 and yielding $4\frac{1}{2}$ per cent. interest per annum. The item of interest amounting to \$208.54 entered among the receipts of this year, includes 19 months' interest on \$2500.00, formerly with the Lincoln Trust Company, of New York City, and 16 months interest on \$1500.00, formerly with the First National Bank of Ithaca, N. Y. Both of these loans were called shortly before the re-investment of the Association's funds in the New York City bonds. The larger current balance carried in bank is due to increased expenditure anticipated when the Quarterly Bulletin is issued, in addition to the present regular Publications.

The current expenses of the Association for the year just closed show a decrease of \$648. 64. It is suggested that in case the Association enlarges its publication ac-

tivity, the Association's expenses could be reduced to a minimum by concentrating in a single office the financial administration of both Publications, and by the Association's acting as its own publisher. The extra expense that has been occasioned in the last ten years by the shipment and re-shipment of the stock from place to place, and by the payment of commissions to the official publisher would have augmented the existing surplus very greatly. It is suggested that it may be advisable in the near future for the Association to employ a permanent and salaried under-Secretary, who should be competent to manage the entire financial and editorial part of the Association's business.

During the past year there has been undertaken a complete rearrangement of the stock of Publications. Said Publications have been shelved in chronological sequence and are practically ready for an exact inventory.

In the two previous reports of the Treasurer of the Association, attention has been called to the fact that the accumulation of a surplus is no part of the proper business of a Scientific Association. In this opinion we heartily concur, but beg to suggest in addition thereto, that in view of failing revenue from annual dues, the proposed Quarterly Bulletin may not only figure as a proper item of immediate expenditure, but also a proper means of re-enlisting and enlarging interest in the Association, and thereby making its future income commensurate with its enlarged future expenditure.

The usual vouchers, receipts, and books of account are on hand for the scrutiny of the Auditing Committee.

Respectfully submitted,

W. M. DANIELS,

Treasurer.

On motion of Prof. C. C. Plehn the Treasurer was instructed to reimburse the former acting-Secretary for the cost of reprinting the monograph of Gryzanowski; with an expression of the Association's appreciation of the motives which prompted the former acting Secretary to assist in defraying personally the cost of the reprint.

Notice was read by the Secretary of invitations from Richmond, Va., Cincinnati, Ohio, Atlantic City, N. J., and the University of Minnesota each asking to be designated as the place for the next annual meeting of the Association. The University of Minnesota expressed its desire to entertain the Association at a summer session, if such a summer session could be arranged. The University of Ohio had also extended its hospitality for the next meeting of the Association to be held in the West.

Prof. J. H. Hollander reported for the Publication Committee, and advocated the eventual concentration of the editorial work of the Association in a single office.

Prof. F. A. Fetter for the Committee on the Bulletin asked permission to report later.

President Jenks reported that co-operation at present between the American Economic Association and the American Statistical Association is impracticable.

On motion, the Chair appointed the following committees: On Nominations, Prof. R. T. Ely, Prof. H. R. Seager, Prof. C. C. Plehn, Mr. C. B. Fillebrown, Prof. F. A. Fetter; on Resolutions: Prof. D. R. Dewey, Prof. W. W. Folwell, Prof. H. R. Smalley; on Auditing of the Treasurer's Accounts, Prof. H. J. Davenport and Mr. Stuart Wood.

On motion, the Association adjourned to meet in special session on Dec. 29, at 10.30 A. M. in the University Club.

W. M. DANIELS,

Secretary.

*SPECIAL BUSINESS MEETING, MADISON, WIS.*DECEMBER 29, 1907.

The Association met at 10.30 A. M. in the University Club, President J. W. Jenks in the chair. The Secretary in behalf of the Committee on the Bulletin reported as follows:

Professor Veditz having been released from the managing editorship of the projected *Bulletin* at his request on account of other duties,

Resolved: That his successor be appointed by the Executive Committee to take over the editorial management, retaining so far as possible the present sub-editorial organization. The resolution was adopted.

Expression of opinion was solicited by the Chair as to the place of the next annual meeting. Professor Irving Fisher suggested that Section I of the American Association for the Advancement of Science would gladly tender an invitation to the Economic Association, to a joint meeting next year in Washington, D. C., and would probably allow the Economic Association to draw up the program for the joint meeting. Other expressions of opinion followed, Prof. C. C. Plehn tendering an invitation to the Association to hold a Summer meeting sometime in the near future in California. On motion of Prof. R. T. Ely the matter of the time and place of the next annual meeting was referred to the Executive Committee with power. The session was then, on motion, adjourned.

W. M. DANIELS.

Secretary.

BUSINESS MEETING, MADISON, WIS.

DECEMBER, 30, 1907.

The Association met at 4.30 P. M. in South Museum Hall, Library Building, President Jenks in the Chair. The minutes of the two preceding business sessions (of Dec. 28 and Dec. 29) were read and approved. The Committee on Auditing the Treasurer's Accounts reported as follows:

Madison, Wis.

December 28, 1907

Your Committee has examined the statement and books of the Treasurer, and find that the items contained in said books, compared with the account as rendered, show a balance of cash on hand of \$2,069.50. Vouchers have been exhibited and approved for all credits claimed by the Treasurer. The certificate has been exhibited of the Princeton Bank of Princeton, N. J., dated December 21, 1907, showing the above balance in cash of \$2,069.59 to be on deposit there, and also City of New York 4½ per cent. Assessment Bonds numbered 430, 431 and 432 and amounting to \$3000 at par value.

STUART WOOD,

H. J. DAVENPORT,

Auditing Committee.

On motion the report of the Auditing Committee was accepted and adopted.

The Executive Committee reported recommending Atlantic City as the place for the next annual meeting, but referred the recommendation to the Association for approval. It was moved by Professor Carver that the Association endorse this recommendation of the Executive Committee, and that the matter be left with the Executive Committee with power. Carried.

The Executive Committee reported recommending the Association to approve of Mr. Fillebrown's proposal for standardizing economic terminology and principles. Mr. Fillebrown's resolution reading as follows was, on motion of Mr. Stuart Wood, approved by the Association:

WHEREAS, This Association, recognizing the value of substantial agreement upon the largest possible number of definitions of common terms and economic principles, commends effort toward the establishment and general enlargement of such agreement, and favors response and co-operation from the members of the Association, therefore

Resolved: That the President is authorized to appoint a general committee of not more than twelve members, upon whose recommendation definitions and statement of principles may be submitted to the full membership of the Association for approval or criticism; the progress of such agreement to constitute an available subject of annual discussion and report in the proceedings of the Association, and be it further resolved that this general committee may appoint or confirm working committees in various departments to conduct the necessary correspondence and report partial or preliminary agreements to the general committee.

The Executive Committee recommended to the Association that the amount to be expended annually on the Bulletin be not limited to \$1200 per annum, but be left to the discretion of the Executive Committee. On motion of Prof. M. H. Robinson this recommendation was adopted.

The Secretary reported that the Executive Committee had selected Prof. E. W. Kemmerer, of Cornell University, as editor of the Bulletin.

Prof. Fetter, for the committee on the Bulletin, reported that an eventual merger of the chairmanship of the

Publication Committee and the editorship of the Bulletin was desirable, although not advisable at present; that Prof. J. H. Hollander will continue chairman of the Publication Committee in the interim, but will gladly be relieved of his duties in that capacity when the editorship of the Bulletin can be assumed by the chairman of the Publication Committee.

Prof. H. S. Smalley for the Committee on Resolutions offered the following report:

REPORT OF THE COMMITTEE ON RESOLUTIONS.

The members of the American Economic Association realizing that the success and enjoyment of the twentieth annual meeting have been in large part due to the unstinted effort and cordial hospitality of the many individuals and organizations of Madison who have co-operated on this occasion, desire to give formal expression to their appreciation of these labors and courtesies.

They therefore extend their hearty thanks to the Social Sciences Club of the University of Wisconsin, the Citizens' Committee of Madison, the Wisconsin State Historical Society, Dr. Reuben G. Thwaites and the Library Staff, the University Club, the Political Economy Club of Madison, the Woman's Club, the Reception Committee of Ladies, and Mrs. Charles R. Van Hise.

The Secretary is directed to transmit a copy of this resolution to each of the persons and organizations above named, and to record it in the proceedings of the Association.

DAVIS R. DEWEY,
HARRISON S. SMALLEY,
WM. W. FOLWELL.

On motion, the resolutions were unanimously adopted.
Prof. R. T. Ely for the Committee on Nominations

reported as follows: for President, Prof. Simon N. Patten of the University of Pennsylvania; for First Vice-President, Prof. Davis R. Dewey of the Massachusetts Institute of Technology; for Second Vice-President, Judge James B. Dill of East Orange, New Jersey; for Third Vice-President, Mr. J. M. Glenn of Baltimore, Md.; for Secretary and Treasurer, Prof. W. M. Daniels of Princeton University; for members of the Executive Committee to serve for three years, Prof. H. C. Emery of Yale University and Prof. John H. Gray of the University of Minnesota; for members of the Publication Committee to serve for three years, Prof. J. H. Hollander of Johns Hopkins University and Prof. A. W. Flux of McGill University.

On motion the Secretary was directed to cast the ballot of the Association for the nominees reported by the Committee on Nominations. The Secretary cast the ballot, and reported the election of the above named persons to serve in the respective offices for which they had been named.

On motion the Association adjourned.

W. M. DANIELS,

Secretary.

Publications of the American Economic Association

FIRST SERIES

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4.	Co-operation in a Western City. By Albert Shaw. Pp. 106.	.75
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6.	*An Honest Dollar. By E. Benjamin Andrews. Pp. 50.	.75

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6.	State Railroad Commissions. By Frederick C. Clark. Pp. 110.	.75

VOLUME VII, 1892

1.	The Silver Situation in the United States. By F. W. Taussig. Pp. 118.	.75
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PAPERS AND DISCUSSIONS

OF THE

**TWENTIETH ANNUAL
MEETING**

MADISON, WIS.

DECEMBER 28-31

APRIL, 1908

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THE PRINCIPLES OF GOVERNMENT CONTROL OF BUSINESS

Annual Address of the President

JEREMIAH W. JENKS

The circumstances of the present financial crisis (1907) have emphasized the importance of the much debated question of the relation of government to business. A few months ago the President of the United States was in many quarters enthusiastically praised for his assertion of the power of the federal government to make business men and corporations amenable to law. A few weeks ago the voices of most of these acclaimers were silent in doubt, while another group of people, on account of these same assertions, were declaiming vigorously against the President as the immediate cause of the panic. The question has likewise arisen in our different states in connection with the Government control of insurance companies, of savings banks, and other business corporations, some of these of a more or less philanthropic nature, while, besides the socialists, thousands of our most unselfishly patriotic citizens have urged upon the public the desirability of municipal ownership and management of the water works, lighting plants, street railways and other so-called public service industries.

It seems a fit time to inquire whether any fundamental principles in connection with this question can be recognized as having some permanent application. If there are such principles, they must naturally be found in the

nature of government and in that of business. A brief review of so broad and complicated a question, even though it contains little that is new, may still be useful in bringing together some old and well-worn but perhaps partly forgotten truths that may prove suggestive. In making the attempt in the very brief period of time allotted, I shall not argue points; I shall simply state them as settled, even though I am aware that the statement is debatable. It is often perhaps as great a service to state a question for discussion as to argue it.

THE AUTHORITY AND CONTROL OF GOVERNMENT
NECESSARY.

2. In all civilized states, whether government be personal or popular, a fundamental condition of political stability and of social and economic prosperity is that under the constitution and customs of the country, so far as the individual members of society need control, they must be controlled by government and the government must direct these activities of the citizens as it thinks best. In a democracy, and it is chiefly of a democracy that I shall speak, if the people think that the views or the acts of their representatives, either in the legislatures, in the courts, or in the executive chair, are wrong, they may endeavor to secure a change of the law or a change in the personnel of their rulers; but in either event, the law, while it stands, must rule, and the office-holders actually in power must use their discretion. The interests of the people, of course, should be safeguarded, and in the long run, if the people have judgment, they will be safeguarded; but in any event there cannot be business success without stable government. The doings of the people in cases where the government acts, must be through the hands of officials and these acts must be put into effect in the man-

ner and in the degree that the officials for the time being think best. The only legal right that the citizens have, so far as government activity goes, is that of having their will carried out through their officials.

IMPRACTICABILITY OF THEORY OF NATURAL RIGHTS.

3. Large numbers of our people find a basis for argument and apparently much personal comfort in a discussion of their "natural rights", as if they had rights opposed to the legal rights given them by the state. Such an expression is, of course, an excellent talking point as a basis for argument to convince people, and perhaps through them to change the opinion of the government as to what ought to be done. But, as an immediate principle to direct governmental action, the theory of natural rights, as interpreted by the individual beyond what is laid down in law, is a vagary of enthusiasts, a breeder of fanatacism; and it is harmful, because it turns aside from practical means the minds of many of our most unselfish, high-minded, public-spirited citizens. The only sound basis for advocating a change in governmental policies is that the welfare of society will be improved by the change advocated. Let all arguments for social reform be made on this basis; let the weight of argument show the practicability of securing the desired benefit; convert thereby as many of the citizens as possible; thus you may convert the government. The whole question of governmental activity in business matters is not one of the "natural right" of an individual as against his government or against his fellow citizens; it is one of the thoughtful judgment of the few men who are directing the affairs of political society as to the practicable means for doing their duty under the powers laid down in the constitution and laws.

CITIZENS MUST RECOGNIZE THE AUTHORITY OF
GOVERNMENT.

4. Too little emphasis is often laid upon the importance of having fixed in the minds of the citizens of every country the fundamental principle that the only way in which citizens can act politically on any social question is through the government. There exists of course the so-called right of revolution, but this may be ignored as foolishly impracticable in this connection. In all countries, though most easily in a democracy, the will of the citizens may comparatively easily be brought to expression if people are thoughtful and active, and not one proposed reform in a thousand is important enough in its effect upon the welfare of the citizens to justify any setting aside of the authority of government for its accomplishment. People sometimes foolishly, on account of the slowness of governmental action or the corruption of a few government officials, apparently despair of the success of popular government. How many times within the last ten years we have heard wild talk about the ownership of our government by the moneyed classes, and of the impossibility of having a wealthy malefactor brought to justice. Some of our late governmental actions, such as the judicial decision in the Northern Securities case, the investigation of the insurance companies in New York, and the exposure of the Trusts by the Bureau of Corporations, have been chiefly valuable, not for their immediate results, but for showing the public clearly and conclusively the very simple but all important truth that government can and does rule. How far then the government of any state shall control business and business men and in what manner, is a matter within the determination of the government itself, keeping always the welfare of the citizens in view.

GOVERNMENT CONTROL WILL VARY UNDER INFLUENCES
OF VARIOUS KINDS.

5. The extent and method of its control of industry will vary in different countries and under differing circumstances. There can be no general rule laid down but this: The action of the government ought to be based on the special circumstances of each individual case. All comparative studies of the experiences of different countries in different lines of industry can be only suggestive. For the settlement of any such question, however, various factors will always be found which must be taken into careful consideration.

POLITICAL CONDITIONS AFFECT CONTROL.

a. The political circumstances of the country, determined quite possibly by geographical considerations, will often be a dominating factor. Germany, for example, is so situated geographically between France and Russia that, in order to be certain that it can maintain its independent existence under threatening circumstances, it must be prepared to concentrate its military power in overwhelming force with the greatest rapidity at the shortest notice. Under such circumstances, considering modern methods of warfare, its railroads should be built primarily to serve promptly its military needs, although, of course, its network of lines will probably in the long run serve this need best if it also serve well economic ends. Likewise the management of these roads must be such that the government without materially lessening their efficiency, can take immediate control and direct the traffic to military ends with little loss of energy. The government of Germany then must so control its railways as to keep them always in readiness for war. It must own and manage them, even though in so doing it were to weaken

their economic efficiency. A similar line of argument, altho entirely different in detail, might well apply to Russia, to France and to many other countries, while it would have application in only a slight degree to Canada, to Brazil, or to the United States.

CONTROL ULTIMATELY NOT A MATTER OF LAW, BUT OF
ECONOMICS AND POLITICS.

b. The question has of late often been discussed, sometimes in a rather heated way, whether the control of the railways of the United States should be state or federal, and in what degree our cities should, of their own motion, control their lighting plants, and the answers to these questions have often been sought along the line of legal precedent. The question is ultimately not one of law, but of economics and politics. Considering our form of government, a court decision of fifty years ago may, to be sure, for the present, be a determining factor; but in the long run, such a question is not to be answered by legal precedent; it is a matter of economic and political benefit. As the decades pass by, industrial inventions and economic conditions bring about changes so important that our legislatures and our courts are gradually forced to recognize them. The clause in the Constitution of the United States concerning commerce between the States, in the minds of the members of the Constitutional Convention of 1787, referred to local tariffs, to commerce on a small scale by water, or to petty traffic in wagons over state boundary lines. If our Constitution is to do its work, it must gradually have its meaning adapted by Congress and the courts to new conditions as they arise, and no technical interpretation in a judicial decision can ultimately stand against the interests of the community as they are affected by economic

changes. Our courts declare the law, it is true, but in declaring the law, they must keep in mind the fact that the intention of prime importance in the minds of our forefathers was the welfare of the people throughout the coming generations; and they will not rigidly insist upon an unchanging application of old words to new conditions. The Courts will of course be slow and careful in their adaptations of laws to new conditions, but eventually the conditions will force the reasonable interpretation. Some people are of the opinion that our Courts of last resort would be strengthened in this kind of work if one or two members were men trained primarily not in law but in the principles of business. The suggestion is worth careful consideration. In the discussion of such questions as these just asked, therefore, the point chiefly to be kept in mind is this: Are the local and state governments so organized that they can meet the new economic conditions? We need not now inquire what specific conditions the founders of our government had in mind when they wrote the Constitution, with the added thought, perhaps, that we must, so far as possible, attempt to hold ourselves back to the conditions of a century ago. With present conditions in mind, federal control of interstate railroads seems the only reasonable control.

CONTROL DETERMINED BY PEOPLE'S ECONOMIC HABITS
AND CHARACTER.

c. We must keep continually in mind also as important factors, determining the extent and nature of government control, the character and industrial habits and temper of the people. If the citizens of a country are ignorant, unenterprising, poor, weak, they will have little initiative and the government must take into its own hands the organization, financing and management of

important industrial enterprises until the people can themselves be trained by observation and gradually increasing experience to undertake them. It may be that in many instances, the government which thus controls and directs large industrial enterprises, and which should act for the benefit of the people as a whole, will be corrupt, and that considerable profits, even great fortunes, will be turned into the pockets of the corrupt officials. But even granting that this may be done (for I wish to blink no truth, however unseemly), the evil is probably only temporary and one that is perhaps in some countries almost to be expected. Even under the most adverse circumstances the benefit to the people from the industries and from the training which they get along industrial and political lines will in all probability bring them further forward in civilization and will enable them sooner to get both the honest control and the economic benefit than if the undertaking of the enterprise were delayed until among the people themselves were found men with the initiative and the capital to direct a great industrial enterprise, like, for example, the building of the Assouan dam in Egypt or the Trans-Siberian railway, or the Panama Canal.

On the other hand, if the people are intelligent, enterprising, wealthy, in very many instances they will develop the industries of a country without political danger far more rapidly by themselves under merely slight governmental supervision than such enterprises could possibly be developed by the government itself.

BY PEOPLE'S HABITS OF POLITICAL INDEPENDENCE OR
SUBSERVIENCE.

d. Again, if a people have been for generations under rigid governmental control, being used to dictation and subservience, the government management becomes both

easier and more necessary, while a people that is alert, ambitious, and used to self-direction, will, in general, prefer to do its own work and can successfully do it.

BY NATURE OF INDUSTRIES CONCERNED: THOSE CONNECTED WITH GOVERNMENT.

e. 1. The character of the industry, too, affects strongly the extent and nature of governmental control over it. Certain industries are so closely associated with the government that it is practically essential that the government manage them. The necessity of careful and rapid transmission of intelligence on government business led governments, even in ancient times, to establish post roads and relays of messengers by whom orders could be sent from the central government to outlying provinces. Gradually out of this necessity of government has grown our post-office system which seems now to exist primarily for the conduct of private business; but if, as at times has been suggested, the post-office business were to be put into private hands, the government would still need to exercise control so rigid that its own messages would certainly be carried promptly and secretly. For similar reasons governments as a rule erect their own forts, maintain their own arsenals, and usually build their own warships. Entirely aside from the question of relative cost, most governments will prefer to build their own war-ships; and even where this is not done in their own yards, the government control must be absolute.

THOSE OF PRIME IMPORTANCE TO THE PEOPLE.

e. 2. Even some industries that are not practically a part of the government's business, may yet be of so fundamental concern to practically all citizens that it would be considered dangerous to leave them in private

hands, provided the individuals concerned could make of the business a matter of personal profit. For this reason the coinage of money is considered a function of sovereignty. Banks are put more strictly than most other lines of industry under government control. In our own country, since education is looked upon as the foundation of good government, our schools have become public schools and the element of personal profit has been almost entirely eliminated from our educational system. It may seem odd to class schools with industries, but some schools, I fear, grind out graduates for profit. Still schools run for private profit now occupy a very subordinate position and are to be considered only as supplementary to our public schools for the benefit of those who have liberal means of support. The extension of our post-office facilities into remote country districts, where the receipts do not nearly cover expenses, is justified on the same grounds. The cheap and rapid transmission of information, as a means of education, must be carried even into districts where a private corporation could not afford to do the work.

THOSE REQUIRING GREAT CAPITAL WITH RETURNS LONG
DELAYED.

e. 3. In earlier times, before the financial resources of the leading countries were so great, and before the corporation as a method of business organization had become common, all enterprises requiring great capital had to be in the hands of the government in order that the resources of the country could be tapped by taxation to undertake them. Under modern conditions in Europe and America this is no longer necessary, but wherever the returns from the investment are only remote, governments still sometimes need to undertake such enterprises.

Several of the most important governmental activities in the United States to-day, although industrial in nature, are of this type, especially those which relate to the development and conservation of our national resources. Foremost in the public eye is the Panama Canal; but of scarcely less importance are the noble plans of the present administration for the development of our great inland water-ways, the bringing under cultivation through irrigation of vast tracts of territory otherwise arid and useless, the reclamation of swamps and bayous through the building of levees and drainage ditches, and the rapidly developing movement for the conservation and eventually the profitable cultivation of our forests. All these enterprises are of such a nature that, although they are fundamentally industrial and ultimately enormously profitable, the government, to protect the interests of coming generations, must exercise immediate control and in most cases must carry on the industry as a government enterprise. Most of these colossal undertakings, however, are of such a nature that the larger part of the direct work can be done, if necessary, through the aid of private corporations, the government retaining ownership and exercising control in the careful inspection and supervision of contracts.

THOSE MENTIONED BY JEVONS: MONOPOLISTIC, SIMPLE,
PUBLIC, NEEDING LITTLE CAPITAL.

e. 4. It has been the usual experience that wherever the element of private profit enters into the management of industry, the work of administration is likely to be more efficient and the cost of production decidedly lessened, so that we need to note what kinds of industries may be managed by the government with least waste. In 1867, in his address before the Manchester Statistical So-

ciety, defending the direct management of certain lines of business by the state, Professor Jevons laid down in his suggestive way the following principles concerning the industries, and the only industries, he thought, which could wisely be managed by the state :

1. Where numberless widespread operations can only be efficiently connected, united and co-ordinated, in a single and extensive government system.
2. Where the operations possess an invariable routine-like character.
3. Where they are performed under the public eye or for the service of individuals, who will immediately detect and expose any failure or laxity.
4. Where there is but little capital expenditure, so that each year's revenue and expense account shall represent, with sufficient accuracy, the real commercial conditions of the department.

The post-office is perhaps the best example of such an industry. Professor Jevons thought these principles applied fairly well to the telegraph and parcels post, but not to railways. As applied to England thirty years ago his opinion was probably sound. The experience of the last few years would probably permit in several countries some extension of these principles; but they are still extremely suggestive and useful in testing industries which the government contemplates managing.

GREAT EXECUTIVE TALENT BEST PAID BY PRIVATE
COMPANIES.

6. The success of all great industrial enterprises depends largely upon the executive head—he must be interested and be as intelligent and as skilful as possible. Such men must ordinarily be chosen only for the sake of the business itself. The experience of centuries has shown that, take it by and large, the motive of self-interest is the one that can best be counted upon to

secure the best executive talent. Under our present stage of civilization private corporations will give higher pay and better facilities for individual initiative and skill in work than is possible for the State in the present condition of public opinion. It is generally conceded here as well as in England that lawyers and captains of industry receive far greater rewards in private life than in public. Some striking examples have been afforded in recent years by the men who abandoned the greatest engineering enterprise of the present century, the Panama Canal, in order to enter the service of private corporations.

BUT MEN SERVE ALSO FROM SENSE OF DUTY.

And yet, on the other hand, the attractiveness of public service for its own sake and for the sake of the distinction of office or from the sense of patriotic duty, is likewise not wanting. Men now in the Cabinet, on the bench of the Supreme Court of the United States and in the Courts of Appeal in our states, have sacrificed tens and scores of thousands of dollars a year to enter the public service. Every person of wide acquaintance can mention instances from among his own list of friends. It is perhaps most usual to find instances of devotion to public service among men who have been especially trained for that, as in our officers in the army and navy. The only possibility of special reward for men of this type is the added reputation of doing excellent work in a position of great responsibility and the consciousness of duty well done. The spirit inculcated at Annapolis and West Point stands ready to sacrifice self if necessary for the sake of duty. I am glad to say that I have found not a little of this same spirit of devotion to duty in the civil service. I think it is rapidly extending and that this will soon materially affect our government work. On the other hand, men trained to rigid unquestioning obedience,

whose entire life is placed at the disposal of their superiors from day to day, are, I think, likely to lack somewhat in the personal initiative demanded of those whose way from obscurity to success must be fought through stern competition. In private management of business the weak are ruthlessly cut out, the strong move forward. In public life men are much more likely to receive positions through political pressure or through a type of examination that does not give the best test of efficiency, or through routine work and length of service. For these reasons we ordinarily expect to find, and experience shows that the expectation is well-founded, that enterprises will generally be carried through more promptly and with less expense in the hands of private managers than under public management.

ATTITUDE TOWARDS SOCIALISM.

7. These circumstances indicate clearly the wise attitude toward socialism, if by socialism we mean the policy of taking into the hands of the state for ownership and management the capitalistic industries. Possibly such a policy may be best in some ages and climes; such a policy, however, could be successful in modern industry only by a change of human attributes or of social conditions so great as to be practically revolutionary. An avaricious man is not likely to become public-spirited in office; he will rather prostitute his office to personal gain.

We need not, however, be frightened by a name. It may well be, that, under certain circumstances, a city may find it wise to own and manage its water works and its street railways; under other circumstances for special reasons, usually political, a state must administer its railway system; again, a great manufacturing enterprise or a gigantic work of public betterment may wisely be carried through by the state. Experience, however, in

various ways and under differing circumstances will show that for the present at any rate such instances are, relatively speaking, rare. Wherever it is made clearly probable that the policy of public management is wise, it should be adopted; but it would be unwise to declare off-hand that all capitalistic enterprises at any time in any future, however remote, can best be managed by the state. It is unsound even to put that forward as a desirable end. The end looked for is the welfare of the citizens. Wherever and whenever that can best be secured by public ownership and management there can be no objection to such form of enterprise. Under present conditions such a policy is relatively seldom wise, for both economic and political reasons. The burden of proof in each case rests upon those advocating it.

AND TOWARDS ANARCHY.

The other extreme of governmental policy, scientific anarchy, or the practical abandonment of all governmental control, is still less often possible; but we may freely concede that either socialism or scientific anarchism in special ages and in special countries might be wise.

CONTROL BY COMMISSIONS OR INSPECTORS.

8. Less rigid and less difficult than direct management is the control that governments may have in connection with the system of private enterprise. A legislature or the executive may lay down fixed rules for certain lines of industry, and a commission or an inspector may apply these rules in special cases. We have in many states railway commissions and bank inspectors whose work is largely judicial in nature. This kind of work does not demand so ambitious a talent, nor a talent so high-priced, although the judicial gift is no less useful to the public, and possibly no less rare than those of the captains of

industry. Even, therefore, where it seems best to abandon the idea of direct public management of industry, it is well within the power of the government and may much more frequently be found advisable to adopt a system of rigid public control.

EFFECTS OF GOVERNMENTAL MANAGEMENT UPON THE
PEOPLE.

9. Of vastly more importance than the immediate economic result, whether good or ill, of the government management of industry, are the indirect effects upon the temper and intelligence and development of the people. The effects of government activity in industry are some of them good, some bad. It is desirable to discriminate carefully, and in determining a government's policy to perform so far as possible only acts that will have a good effect upon the people.

IT MAY SET AN EXAMPLE TO PRIVATE ESTABLISHMENTS.

As has already been explained, the government activity in behalf of the general welfare can at times be carried out on lines impossible for a private company. It is possible for the government, if necessary, to support an industry in part by taxation, as, in order to increase the general intelligence, we in part support our post-office. For the same end the Government may in certain lines make experiments, industrial as well as political. With careful regard for cost of work and justice to the taxpayer the Government in its industrial enterprises should lead and educate public opinion in promoting the welfare of society. In all government enterprises, a standard of excellence should be set in the quality of work done, in the conditions of work of the laborers, in strictness of accounting, in upright management.

IT SHOULD FIX LIMITS OF COMPETITION.

It may sometimes be desirable, in order that the benefits of private enterprise may be secured without giving to private corporations the unreasonable profits which under certain monopolistic circumstances they might be able to secure, that the government compete directly with private enterprise in order to hold prices within reasonable bounds. It might become best for the post-office, for example, to extend its parcel post in competition with the express companies. Ordinarily, however, the government can best direct the private management of public enterprises through inspection and supervision rather than by direct competition. We must recognize the fact that competition affords on the whole the best stimulus to effort, to originality of thought, and to the development of personality in enterprise. The government may thus, as already intimated, speaking generally, secure the public welfare best by encouraging private enterprise, simply fixing the limits of competition within standards of honesty and efficiency of service. This principle of competition, too, it should be recognized, is found not merely in business where the reward is money profit, but likewise in all other fields of endeavor, where the reward may be fame or merely a spirit of self-satisfaction over good work well done. There is competition in football, even in philanthropy, as well as in money making. The government should simply see to it that the competition in all directions is kept within fair and just limits.

THE GOVERNMENT CANNOT ESCAPE THE RESPONSIBILITY OF CONTROL.

10. Whether the government will or no, it cannot throw off the responsibility of supervision and control over such industrial enterprises as we have considered,

and it seems certain that, unless business men learn to recognize more fully their obligations to the general public, the government must extend the range of its control.

IT MUST EXTEND ITS CONTROL UNLESS BUSINESS
PRACTICE CHANGES.

II. Many of the business men of the country do not yet fully recognize their obligations to the public, nor do they see clearly the fiduciary character of their business. They are trustees for the public in no small degree. They excuse themselves for many acts inimical to the interests of the public on the ground that they may prove beneficial to their stockholders—and this in all good faith. With the increase in the size and complexity of business organizations, however, the principle of *caveat emptor* ought not to be made to apply in general. The common man cannot care for his own interests. A depositor in a bank, for example, cannot of himself judge the risks he is taking. If the banker will not carefully protect his depositor, the Government should compel him to do so by more rigid control.

RELATION OF THE PANIC TO GOVERNMENT CONTROL.

The fact is that the late widespread suspension of cash payments throughout the country, disguised somewhat by the use of clearing house certificates and other devices, and by the fact that bank notes were safe, is a public calamity due less to the activity of any government official than to the need of more rigid government control. Failure to honor a check in cash is enough of the nature of failure to redeem a bank note so that such an act ought not to be passed over lightly. Our bankers, in order to pay high returns to their stockholders, had in some instances gone much beyond the limit of safety in reducing

their reserves. They had too often resorted to practices doubtful for a fiduciary business; they had counted deposits in other banks as part of their own resources, a practice which, though legal, is of doubtful wisdom, and when the storm came, each looking to his own need (with the exception of some of the larger establishments whose own close relations with the market compelled action), got what cash he could and retained it in his vaults, thus increasing the tension of the stringency. Unless the bankers can devise better plans than they now practice for checking the reckless among their fellows and heartening the over-cautious, the Government must play a more active part in control. I do not mean that the Treasury is to be more active in an emergency. The government must do more to prevent the emergency's arising. And this principle applies, not only to banks, but with greater emphasis to all great companies, railroads and trusts, whose stocks are at the mercy of the directors, and the prices of whose products within rather broad limits are only slightly regulated by competition. What does a stockholder in a great corporation like the American Tobacco Co., or the American Sugar Refining Co., or the Standard Oil Co., or any of the 50 largest Trust companies, know of the real value of his holdings and of what may be done within three months to increase or lower the value? And what does the public know of the measures that may be taken to increase or lower the prices which the grocers must pay the manufacturing companies for their goods? Business men in these important positions will in time learn their duty toward the public, but probably the Government must lead the way. The change from small industrial conditions to large has come so swiftly that the business men in most cases are not morally to blame for their lack of adjustment to new con-

ditions, but they will be blameworthy, if they delay, and the Government does well to stimulate their activity.

SUMMARY.

12. It would be beyond my purpose at the present time to apply these general principles to specific cases in the United States, and to give my opinion as to exact rules that the Government should lay down or as to the industries which the public should own or control. I consider only a few general principles. This much may be said in summary. In the discussion of such questions as public control of public service corporations we ought not to be swayed at all by the fear that we shall be called either socialists or scientific anarchists. We should recognize that there is much truth in the teachings of those who advocate government ownership and management; perhaps an equal amount of truth in the teachings of those who advocate the let-alone policy carried to the extreme. The public and scientific thinkers owe a debt to both classes. It is our duty to judge each individual case on its own merits, taking into account local conditions, industrial, political, and personal. Moreover, we should recognize the fact that society and political institutions are changing and progressing and that a policy wise to-day may be unwise twenty years hence; that a policy successful in Europe will probably not be equally successful here; that in no case can we accept as conclusive the experience of others or even our own present experience; and that on the whole the government probably needs to extend its control especially over the larger companies, unless their managers take the public more fully than now into their confidence. In every case our final appeal is to common sense, good judgment, and an unselfish regard for the public welfare.

ARE SAVINGS INCOME?

IRVING FISHER.

It is but natural that the heretical views contained in my book, "The Nature of Capital and Income",¹ should have aroused criticism, but I confess I have been surprised at the manner in which this criticism has been distributed. Many of the views expressed to which resistance was expected have been accepted, while some of those which seemed beyond debate have been among the first to be questioned. The most striking instance of the latter is found in the case of the thesis that an increase in the value of capital is not a part of income. This has been a cherished heresy of mine since it was first stated² in 1897.

I realize that increments of capital, or "savings", are often regarded as income both by economists and business men. Edward Cannan has specifically stated that the income of a nation during any given period consists of two parts, the first being the sum of goods enjoyed by the community during the given period, and the second, all additions to capital during that period. Accountants often, if not usually, reckon income on the same basis. The burden of proof, therefore, rests with those of us who deny that savings are income. The object of this paper is to justify this negation.

We may pause here to explain the senses in which terms will be used. The phrase capital-goods is used

¹ New York (The Macmillan Co.), 1906.

² "The Rôle of Capital in Economic Theory", *Economic Journal*, December, 1897, pp. 532-3.

in the sense of any stock of wealth or property existing at an instant of time. The value of such a stock is called capital-value. The term "capital" is used as an abbreviation of *capital-value*. In the same way the phrase income-services is used in the sense of any desirable events which occur by means of capital goods during any given period. The value of these services is called income-value. The term "income" is used as an abbreviation for *income value*. Finally the term "savings" during any period is used to signify the increase in capital value in the period under consideration.

If these definitions are adopted, the question "Are savings income?" would seem to answer itself in the negative. We have, however, no desire to avoid an issue by framing definitions. The issue which we have to discuss is more than a verbal one, and cannot be escaped by recourse to definitions. The adoption of the definitions just formulated for capital, savings, and income, merely obliges us to restate the question. If we employ these definitions, the question, "Are savings income?" used as the title of this paper, while it has the merit of brevity, is not accurately stated. As a more accurate formulation, we may substitute the following questions: In what respect are savings and income alike? In particular, are they alike in their relations to capital? We know that capital is the discounted value of expected income. Is it true that capital is also the discounted value of expected savings? If so, is the discount process applied to savings in the same way as to income? Or do we need to distinguish carefully between the discount process as applied to savings and the discount process as applied to income?

I maintain that savings are not discounted in the same way that income is discounted. My opponents maintain

that they are. This is the real issue between us. To separate still more clearly the essential issue from all questions of terminology, the question under debate may be expressed without using the term "income" at all, thus: *Is an expected increase in the value of capital discounted in the same way that the expected services of capital are discounted?* To this question I answer, no. My opponents, if I understand them, answer, yes.

It is granted that "savings come out of income". But we shall avoid misunderstanding if we add that the phrase "savings come out of income" is not to be taken in the sense that savings were first income and afterward became capital. On the contrary, these savings always were, and still remain *capital*. They are "saved" from becoming income. *Savings come out of income in the sense that whatever amount is saved diminishes current income by just that much.* It is contended that savings, coming out of income, cannot be *in* income. Those who regard savings as taken out of income and yet as still a part of income are guilty, we believe, of a species of double counting and of a confusion between capital and income.

A few examples will serve to illustrate the issue which has now been drawn. A man owns a forest, newly planted. It cannot give him any income by yielding lumber for perhaps twenty years. During this period the value of the forest will gradually rise as the time for cutting approaches. If the rate of interest is five per cent. and we suppose the yield of the timber land to be certain, the accumulation of value will take place at five per cent. per annum. If the land is regarded to-day as worth \$100,000, it will, under these conditions, become worth \$105,000 at the end of a year, and will continue to accumulate at 5 per cent. compound interest until

the time of cutting arrives. Those who maintain that savings and income are indistinguishable point out that the holder of the land worth \$100,000 may, at the end of the year, realize an increment value of \$5,000 by selling a part of his land, or by selling all of it and reinvesting the original principal. "Why, therefore", they ask, "should we not count the \$5,000 added to the capital value as true income?" Another example is that of a bond increasing in value between interest payments, or that of a deferred annuity, or, simplest of all, that of a savings-bank account accumulating at compound interest.

In all these cases, and many others which might be cited, my critics maintain that the annual accretion in the value of any capital-goods should be regarded as indistinguishable from and as part of the income from that capital. It is with this thesis that I take issue. I contend that an increase of capital value, as long as it remains a part of the capital and is not detached from it, is capital and not income in the sense that it can be discounted as other income is discounted.

It is important to observe at the outset that, although income is produced by capital, the value of capital is, paradoxically, produced by the value of income. We may say that apples are produced by an orchard, but we cannot say that the value of the apples is produced by the value of the orchard. On the contrary, the value of the orchard is produced by the value of the apples. In other words, when we have to deal with the *values* of capital and income and not their *quantities*, we have to reverse the order of causation. Capital value is always the discounted value of expected income. It follows that the increase in the value, during any period, of an orchard, a forest, a bond, an annuity, a savings-bank account, or any other property or wealth, constitutes "savings" in the

sense we have given to that term. This increase in value is due to the progressive approach of the time in the future when the orchard is expected to bear apples, the forest to yield timber, or in general the property or wealth to yield up its benefits or services. It is the gradual approach of future services which causes the value of any instrument to rise. Moreover, this cause—the approach in time of expected benefits from capital-goods—is the only cause for an increase in its value which we need to consider here. Other causes, such as the influence of uncertainty, are not under discussion. We may assume, therefore, to simplify the discussion, that there is no uncertainty about the future yield of capital and no change in the rate of interest by which it is valued.

Under these conditions, the capital will increase in value until the first item of income arrives. The orchard, for instance, will appreciate up to the time of its first crop. When this crop is detached, the value of the orchard will fall back by the value of the crop removed from it. Thereafter the value will again ascend with the approach of each succeeding crop and descend upon its removal.

The successive increases and decreases in value of the orchard may or may not be equal to each other. But whether equal or not, they must not be confounded. After reading what my critics have written on the subject, it seems to me that they have failed to distinguish between the *rise* of capital value and its *fall* when its services are rendered; and that this confusion between the rise and fall of capital is in turn due to fixing attention exclusively on the case where the principal or capital sum remains intact. We shall, accordingly, begin by considering this case. Let us therefore suppose that the orchard will yield crops, of equal value, annually and forever. The

case is therefore, to all intents and purposes, the case of a perpetual annuity. Let MN (Figure 1) represent the value of the orchard (or other perpetual annuity) at the beginning. This is the discounted value of its expected succession of crops. As the first crop (or interest payment) approaches, the value of the capital will rise in anticipation of that crop until it (the capital value) becomes equal to mn ; whereupon the crop nq is removed, and the value of the capital is restored to its original amount mq , equal to MN . The capital value then gradually ascends again until the next crop (or interest payment) is reached, and falls as the crop (or interest) is detached.

According to the concepts which I believe to be correct, income is represented in this diagram merely by the vertical lines nq , $n'q'$, etc., marking the detachment of the crop from the orchard or of interest from the annuity. These detachments are the definite events or services in anticipation of which the orchard or bond has any value whatever.

Now, it is true that the value of the orchard rises between successive crop seasons by an amount exactly equal to the value of the annual crop. It would therefore seem at first almost unnecessary to distinguish between the rise and fall. The crop (or interest), it might be said, is itself the increment of value. Any sharp distinction between the ups and downs of such a curve seems at first unnecessary, if not absurd. It makes, however, a vast difference to our analysis, whether we consider the income of the orchard or the annuity to be the successive "ups" or the successive "downs" in the curve. In passing it may be noted that although in the particular case considered the "ups" and "downs" are equal, they are nevertheless not coincident in time. The significance of this

difference between them will be emphasized later. At present it seems best to proceed from the simple case of a perpetual annuity with a capital value remaining unchanged from year to year to the more general case in which the orchard or other source of income yields a changing and terminable series of crops or services. In this general case the "ups" and "downs" of capital value are not even equal to each other. The case is represented in Figure 2. Here the value of the property is at first MN . This represents the discounted value of all the expected future income. We must, in constructing this diagram, proceed backward from the remotest point in the future at which income accrues. Let the last item of income be a , the next to the last b , and the others c, d, e . Through the top of the line a we draw a curve called the "discount curve",³ the height of which at any point represents the discounted value of a , as anticipated at any time. This discount curve is drawn descending gradually toward the left until it reaches a point directly over the next to the last item of income b , whereupon b is added, and the combined height of $m''n''$ represents the value of the capital at this earlier point of time. From n'' in turn another discount curve is drawn, $n''q'$, until a point is reached directly over the income item c ; we then proceed upward in the same manner to n' , and descend by the discount curve to N''' ; and so on, until we finally reach the point N , the height of which, MN , is the combined discounted value of all the income items a, b, c, d, e .

It is evident, reversing our outlook, that, as time elapses, the value of the capital will gradually rise from the height of N to the height of n , and then proceed by sudden falls and gradual rises until it reaches zero at m''' , after the last available service, a , is rendered.

³ See the writer's "Nature of Capital and Income", p. 204.

Consider first the period $M M'$. During this period there is only a rise in the capital value, and no fall. It is certain, therefore, that, so far as this period is concerned, we cannot identify or confuse a rise with a fall. The capital rises steadily from $M N$ to $M' N'$, the actual increase being $N' P'$. The question at issue is whether or not $N' P'$ is to be regarded as income in the same manner as a, b, c, d, e are regarded as income. Is $N' P'$ discountable in the same manner as a, b, c, d, e ?

It is clear that the capital $M N$ is fully accounted for by discounting the items a, b, c, d, e ; and that if we should attempt to add to the sum of the discounted value of these items the discounted value of $P' N'$ also, the resulting sum would be larger than $M N$ and incorrect. It follows that $P' N'$ cannot be considered as discountable income in addition to the other items of income.

We may note here a curious pitfall which seems to have entrapped some economists. Not only are they disposed to regard the "up" of the curve as income instead of the "down", but they include in the "up" the original sum $M N$. If a person receives an orange grove, worth $M N$ because of the value of the oranges which will be afterward yielded in the items, e, d, c, b, a , one of my critics states that he would regard the receipt of the orange grove $M N$ as itself true income, and afterward the interest upon its value as additional income. In other words, he regards *all* the "ups" of the curve from M to m''' as income.

It is quite true that the aggregate sum of all these "ups" will be exactly equal to the aggregate sum of all the "downs", a, b, c, d, e , on the same principle that a stone, thrown into the air and falling again to the level from which it is thrown, must have risen to an aggregate height equal to its aggregate fall. Inasmuch as the sum

of the "downs" is the aggregate income, it might seem that we were at equal liberty to regard the equal sum of all the "ups" as income. But this is an error; for, although the sum of all the "ups" is equal to the sum of all the "downs", their location in time is different. The "ups" always occur in advance of the "downs", and therefore the discounted value of the "ups" would be greater than the discounted value of the "downs". And, since we know that the discounted value of the "downs" is correct, it follows that the discounted value of the "ups" cannot be correct.

A wrong path, if followed far enough, will lead to difficulties. The critic above referred to, when pressed, admitted that, according to his definition of income, the bequest to a young man a few years ago of securities bearing an income of \$5,000,000 a year (and for that reason valued at \$100,000,000) was a bequest not only of an income of \$5,000,000 a year, but also of an additional initial item of income of \$100,000,000! To include, in this manner, as income the capital value of other income is not only opposed to common sense, but leads us to ask the question, How could a testator contrive to bequeath an income of \$5,000,000 without at the same time unintentionally bequeathing an additional initial instalment of income of \$100,000,000? To tie up his bequest in trust would not avail, for the beneficiary, though he could not spend the principal, would still be in the position of acquiring its value as an equity of \$100,000,000 against the trustee.

Clearly the \$100,000,000 is not income, but capital—the discounted value of income. The young man did not receive \$100,000,000 of immediate income *and* \$5,000,000 of income each year thereafter. He merely received an

income of \$5,000,000 a year, the \$100,000,000 being its capitalization or discounted value. He is only half as well off as an heir to whom is bequeathed an initial sum of \$100,000,000 in addition. The income accounting adopted by my critic leaves no room for this distinction. Naturally, it leads to double counting; for, if the logic is sound by which the heir is to be regarded as receiving an initial item of income of \$100,000,000 as well as successive items of \$5,000,000 a year forever, what is to hinder our discounting all these items of income indiscriminately, including the \$100,000,000 immediately receivable, and thus obtaining \$200,000,000 as the value of the young man's bequest just before the \$100,000,000 is paid over to him? In fact, such a process, if permissible once, can be repeated indefinitely. Having last deduced that the heir receives an initial item of \$200,000,000, we now have a series of income items, the capital value of which is \$400,000,000! Evidently the fallacy of double counting, once begun, logically multiplies itself indefinitely. Additions to capital, whether acquired by gift or by saving, are not income, but the present value of income.

While I do not suppose anyone will gainsay that income must be so defined that the capital $M N$ is the discounted value of the whole income, it may still seem that, in some manner, $P' N'$ is discounted in the value of $M N$ and may be called income. And this is true; but the manner in which $P' N'$ is discounted is not the same manner as that in which the genuine income, a, b, c, d, e , is discounted. *$N' P'$ is discounted instead of income, not in addition to it.* An example will make this clear. A speculator buys a piece of city real estate for \$1,000, hoping it will sell later at a higher price, and not intending to make any use of the ground in the meantime. If he were asked whether or not the value of the land when he bought

it included an anticipation of its future rise, he would undoubtedly answer in the affirmative, and he is right in the sense that the future increase of value is included in his discount process. But the speculator, it must be remembered, is depending on reselling the land to someone else. This may be another speculator, but ultimately there must be some owner who will use the land otherwise than by merely reselling. This ultimate use of the land is in view from the very start, and the price at which each speculator hopes to sell will be itself the discounted value of the uses to which the land will finally be put. It follows that the speculator who discounts a future rise in price is merely *rediscounting* the future discounted value of the final uses of the land.

This fact is shown clearly in the diagram. The speculator who holds the property in the time interval $M M'$ regards $M N$ as the discounted value of $M' N'$, which certainly includes the increment $P' N'$. This increment is really discounted by him, as he does not look any further ahead than the point of time N' . But if we look beyond the point of time M' , we observe that $M' N'$ (including $P' N'$) is itself the discounted value, at that point of time, of the income items, a, b, c, d, e . Consequently the man who pays $M N$, because he sees that the future value will be increased to $M' N'$, is in effect discounting a, b, c, d, e . In short, these items of income, a, b, c, d, e , are discounted in two stages. In the first stage, they are discounted from the remotest point m''' , back as far as M' , the result being $M' N'$; in the second stage this capital value $M' N'$ is in turn discounted back to M , the result being $M N$.

There are other respects in which the increase of capital value $P' N'$ differs from the true income a, b, c, d, e . One is that the location in time of this increase of value

is, for discount purposes, *movable instead of fixed*. To make this point clear, let us proceed to a time later than M' , namely M'' , and consider in what respect $M'N$ can be regarded as including the discounted value of the increments of capital between the points of time M and M'' . There are evidently now two increments of value, the first being $P'N'$, the increment of value in the first period, and the second being $P''N''$, the increment in the second period. These two increments, together with the principal sum, are represented as $M''N''$, and form the total value of the capital at the point of time M'' . Thus $M''N''$ consists of three parts, (1) $M''R$, the original capital, (2) RP'' , the increment (equal to $P'N'$) accruing in the first period, and (3) the increment $P''N''$ accruing in the second period. But in this statement we have been forced to shift forward the first increment from $P'N'$ at the end of the first period to the position RP'' , at the end of the second period. Without such shifting forward, it would not be true that the original capital value of MN was the discounted value of the principal $M''R$ together with the discounted value of the two increments $P'N'$ and $P''N''$. The proposition is true, only on the condition that the increments for two periods are both located at the end of the second period. If a still later point of time is taken, the increments, to be discounted, must be shifted still further forward. Now this shifting of time only applies to the increments of capital value. It does not apply to genuine income items, a, b, c, d, e . In short, *genuine items of income are discounted from the times at which they accrue, whereas increments of capital are discounted not from the times at which they accrue, but from the end of the arbitrary period under consideration.*

Putting the principle in its most general form, we may

say that for any arbitrary interval of time, the value of the capital at its beginning is the discounted value of two elements: (1) the actual income accruing within that interval, and (2) the value of the capital at the close of the period. This value of the capital at the close of the period may in turn be resolved into two elements, first, a part which is equal to the original value of the capital, the "principal", and second, any "net savings" during the period. In case the "savings" are negative, they are called depreciation and are subtracted. The "savings" form merely a part of the final capital, are located at the end of the period under consideration, and are shifted from point to point according to the length of that period.

Another distinction between savings and income is that, whereas we may postulate any one item of income independently of any other, we cannot postulate an increment of capital until we know the items of income from that capital. Its value is entirely *derivative* and has no separate existence.

In Figure 2, for instance, we can postulate separately each one of the items, a, b, c, d, e , without regard to the others, but we cannot postulate the value of $P' N'$ before we have postulated the items a, b, c, d, e . There is, therefore, a profound distinction between the *primary* items a, b, c, d, e , which are mutually independent, and the *secondary* item $P' N'$, which is wholly dependent on those primary items.

Still another distinction between savings and income consists in the fact that a change in the rate of interest will not change the items of income, a, b, c, d, e , but will change the increments of capital, $P' N', P'' N''$, etc. If the rate of interest is changed, the discount curves in Figure 2 will all be shifted. As a consequence, without

any change in the items of income, a, b, c, d, e , there will be a change in the increments of capital.

The facts that an increment of capital is derivative from the items of income, and that it changes with the rate of interest at which these items are discounted, are the ear-marks of capital. We know that capital value is derivative from income and that it changes with the rate of capitalization.

It is clear, therefore, that $M' N'$ is merely an intermediate capitalization of a, b, c, d, e . It does not, nor does any part of it, play the same rôle as do the items of income a, b, c, d, e . The part $P' N'$ which represents increased value is in no way different from the rest of the entire capital $M' N'$. It follows that, in cataloguing the entire series of items of income from beginning to end, we cannot include $P' N'$ as income on the same basis as a, b, c, d, e ; for we should be guilty of double counting. To the extent that $P' N'$ were included, we should be including part of the anticipated value of a, b, c, d, e . We should, in other words, be including in our enumeration of income not only a, b, c, d, e , but also a part, $P' N'$, of the capital value of these same items. The former items are realized income; the latter item is merely the anticipated value of this income. The anticipated value is located at the point of time M' , but the realization does not begin until the point of time m is reached. The anticipated value of income is not income, but capital. To consider any part of capital value as income is thus to confuse capital and income. Capital value is merely a present expression or reflection of future income. Each recipient of income has open to him two options. Any increment of his capital may be detached from the rest of the capital, and this event of parting company will then constitute an item of income. Or, reversely, the increment may be

“saved”. That is to say, it may be saved from being detached from capital. In this case it remains capital, and the income which otherwise would have emerged by detachment fails for the present to emerge at all. In place of it we have the savings—the present value of more income in the future.

These two options, to use income or have savings, are mutually exclusive. “You cannot have your cake and eat it, too”, is an old adage which stands for one of the profoundest of economic truths. This truth is that savings and income are not coincident, but alternative. Any increase of the one is at the expense of the other. Savings are savings because they have not been detached from capital, but remain attached. Income issues by detachment. The bondholder values his bond by discounting each coupon from the time at which it is to be detached. A fruit tree is valued by discounting the fruit from the time it is to be picked; a farm by discounting the crops from the time when harvested. We do not need here to inquire what becomes of the detached coupon, fruit, or crop. They may still go to swell capital in some other category. The coupon may be reinvested in another bond; the fruit may enter into the capital stock of a merchant; the crops may become part of the accumulation in a granary. Thus the income from the bond, the fruit tree, or the farm may be invested as expense for purchasing or otherwise acquiring capital other than the capital from which they sprung. The point for us to observe is that, so far as the original or parent capital is concerned, the time of detachment marks at once the yield of a certain amount of income and the cessation of an equal amount of capital out of the parent stock. The detachment of a \$5 coupon is an event which constitutes an income of \$5 from the bond and which instantly reduces the value of the bond by

\$5. The detachment of each dollar's worth of fruit from the tree or of crops from the farm means a dollar of income and a deduction of a dollar from the value of the tree, or the farm. Contrariwise, if for a time the coupon, the fruit, or the crops remain attached to the bond, the tree or the farm, they then remain a part of the parent capital and the income which would otherwise have been realized is held back. We must distinguish sharply between detachment from and attachment to capital, and we must remember that they are mutually exclusive. So long as an item remains attached to capital, it is not income; when it is detached, the event of its detachment is income. No principle in economics is more inexorable than this. By no sleight of hand can we escape the dilemma in theory which confronts every capitalist in practice. Either he can take out a dollar's worth of income or save a dollar's worth of capital, but he cannot do both. His savings "come out" of income to make capital, but for that very reason they are capital, not income.

The fallacy of including savings under income has been expressed both as a confusion between capital and income and as a double counting of income. Savings are simply the capitalization of future income. If a man saves capital he is not only diminishing present income, but increasing future income. The upshot of the whole matter, therefore, is that "savings" imply a change in the "time shape" of an income stream, viz., (1) a decrease of present income, and (2) an increase of future income. What is subtracted from present income is added (with interest) to future income. But the future addition cannot occur without the present subtraction. The savings must actually come out of present income. They come back to income in the future only. To regard savings which are reinvested for the sake of

future income as still constituting a part of the present income, is to assume a future return without a present sacrifice. Savings mean a lessening at one point of time and an increase at another.⁴

In the last analysis, therefore, the two options which constitute the dilemma of the investor are choices between two different income streams. If he "saves", he thereby chooses an income stream smaller than it would otherwise be in respect to present income; larger in respect to future income.

Let us consider the case of a bank depositor who allows his account to accumulate at compound interest. If he has \$100 at the start, at the end of the year he will have \$105. It is quite true that he might receive the \$5, detaching it from his principal. He might also redeposit the same. In the following year, when his interest is \$5.25, he might go to the bank and again go through the ceremony of receiving and redepositing. It may be asked, Would we not, under these circumstances, be compelled to say that this man was actually receiving the income from his capital even while he was allowing it to accumulate? To this the obvious reply is that he received income when it was handed to him across the teller's counter, but he suffered an outgo when he pushed it back and added it again to the principal sum. The process of detaching the interest was income from the capital in bank. The process of reattaching it to capital was the opposite, and must be called outgo, to be debited to that same capital. Since these two terms are equal, opposite and simultaneous, they evidently efface each other completely. The conclusion is, therefore, that when capital

⁴ The significance of this fact in the theory of interest is emphasized in my "The Rate of Interest", New York (The Macmillan Company), 1907.

is accumulating we cannot regard it as yielding income unless in the same breath we regard it as cancelled by an equal outgo.

The need to make such cancellation cannot be evaded by the device of placing the savings withdrawn in some other institution. In that case our accounts would show that the original savings bank did actually yield income to the extent to which annually the interest was detached, but that the other institution must be debited with the corresponding items as outgo. Each institution must be treated independently in this accounting. The person who held the deposit would not be receiving the benefit of his income, because he would be out of pocket by an exactly equal amount for the other institution into which he has put the savings. One institution has given him income; the other has occasioned him expense.

The fallacy that savings, though taken out of income to form capital, are still regarded as income, is due, oddly enough, to the usages of accounting. Business men and bookkeepers delight in conforming all accounts to a fixed norm, in which capital is regarded as invariable and income as a perpetual annuity. In economic theory we find the same tendency in many economists, notably Prof. J. B. Clark, whose very concept of capital postulates its perpetual reconstitution or upkeep. In the actual world there is not and cannot be any case of absolute immutability of capital value and perpetuity of income. Surely our theories of capital and income should admit the variability of both capital and income. But the bookkeeper prefers to make the fiction of invariability even when there is actual variability. In fact this fiction is of great convenience for bookkeeping purposes; it enables us to compare every condition with a fixed standard. No objection is offered here to the practice as a practice. The

objection is to conceiving a mere bookkeeping fiction as an economic reality.

If there be detached from capital a sum more than equal to the increment of value during a stated period, the bookkeeper says that "the capital" has been trenched upon or "the income" has been exceeded. By the "capital" he means the original capital *supposed* to remain intact, and by the "income" he means also a *supposed* income, viz., that which would leave the capital unimpaired.

Thus, in Figure 2, if we consider the time interval $M'' m$, we find that the increase of value is $n p$, but the income detached is $n q$, which "trenches upon capital" by the sum $p q$. This depreciation of capital $p q$ is by bookkeepers deducted from the total realized income $n q$, in order to find the normal or standard income $n p$, that is, the income which, if realized, would leave the capital intact. But we must not fail here to note that if the sum $p q$ is really taken out of income, or reattached to capital, and thus used as a depreciation fund, it will necessarily transpire that the diagram in Figure 2 will be materially altered subsequent to the point p . It will in that case not descend to q , but begin ascending from p along a different "discount curve".

There is, therefore, a vast difference between *reckoning* a depreciation fund and actually sacrificing it. Only in the latter case can we say with literal truth that income does not trench on capital. Yet bookkeepers keep up the fiction that income does not trench on capital by the simple device of refusing the name income to that part which so trenches. Under this fiction the income from a fund of capital can never vary from the computed interest upon that fund. I have adopted the phrases "standard income" or "earned income" or "earnings" to

designate the income which leaves capital intact. The phrases suggest that the magnitude to which they apply is not actually realized income, but an ideal or hypothetical norm by which we measure the actual income and the deviation from which in one direction or the other registers the depreciation or the "savings". If actual income exceeds standard income, the excess is depreciation. If the reverse is true, the deficiency constitutes "savings". The case of depreciation has been illustrated in the diagram in the time interval $M'' m$. The case of savings is illustrated in the time interval $M''' m'$. Here the increment of capital, before the income $n' q'$ is detached, is $p' n'$, leaving $q' p'$ as the net increment or "savings". In this case the bookkeeper adds the increment of capital to income, under the fiction that it would be possible to detach this additional sum "without trenching upon capital". This is true, but possibilities are not actualities, and an item is not made income merely because it might so be used. So long as $p' q'$ is *not* detached, but remains attached, it is capital and capital only. It is "earned income" because it *could* be detached and leave the capital intact, but it is not realized income, or what we have called, for short, simply "income".

Adopting, then, the foregoing terminology, we may state that capital is discounted income, but not discounted earnings. It is true that capital is the discounted value of *present earnings assumed to continue perpetually in the future*. But this proposition is highly hypothetical. We have already seen that even present "earnings" is a hypothetical magnitude. The above proposition adds another hypothetical condition that this hypothetical magnitude shall continue unchanged forever. Only by means of these hypotheses are we enabled to state that capital is discounted earnings or capitalized earnings. Our result

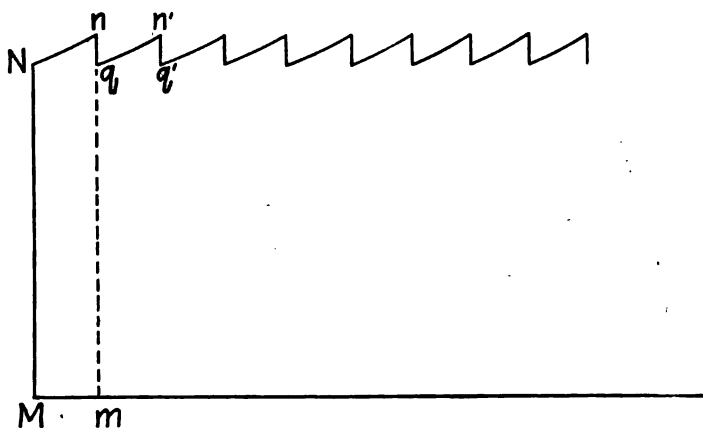


Fig. 1

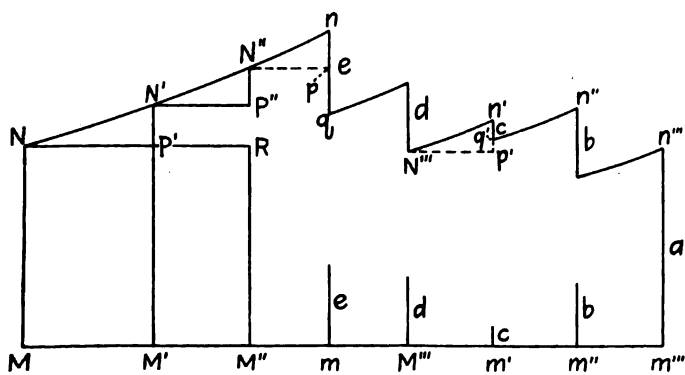


Fig. 2

is therefore that (1) capital is the discounted value of expected income—actually realized income, however variable,—and (2) it is the discounted value of present earnings supposed to continue perpetually. In other words, capital is the present value of either of two income streams, one, the real and variable income stream, and the other an ideal perpetual annuity. The ideal perpetual annuity is the bookkeepers' substitute for the real income to which it is equivalent.

A practical example of the fallacies concerning savings, earnings and income is found in assessing income taxes.

It is not intended to discuss here the practical advisability of any particular system of taxes; but, supposing, for the sake of illustration, that there exists in a community a uniform system of income taxes, it is obvious that it makes a difference whether these income taxes are assessed upon "earnings" or upon "income".

Let us imagine (as in my book *The Nature of Capital and Income*) that there are three brothers, each of whom receives the same legacy of \$10,000, and that interest is 5 per cent. The first brother invests his \$10,000 in an annuity of \$500 a year forever. The second puts his in trust, to accumulate at 5 per cent. until it has doubled in value, which will be in about fourteen years, after which it is invested in a perpetual annuity of \$1,000 a year. The third, having spendthrift tendencies, buys an annuity of \$2,000 a year, which by actuarial calculation will last him a little less than six years.

Evidently, if we tax income, the first brother will be taxed on a perpetual income of \$500 a year; the second will not be taxed for fourteen years, but thereafter will be taxed on an income of \$1,000; while the third will be taxed on an income of \$2,000 a year for six years, and thereafter will have no income and no tax.

On the other hand, if we tax earnings, we shall tax the first brother to the same extent as before, but the second and third will be taxed very differently. The earnings of capital of the second brother, instead of being nothing for fourteen years, is \$500 in the first year and \$525 in the second year, etc. The third brother, who during the first year took out \$2,000 from his capital, would, according to the same method of reckoning, need to deduct from this sum the \$1,500 which represents the amount that he would "trench upon his capital", leaving \$500 as his earnings. At the beginning of the second year, this same third brother would possess a capital of only \$8,500, the "earnings" of which would be only \$425. Thus his earnings progressively diminish until in the sixth year they are only \$90. The capital having then been destroyed, no earnings remain.

If now a tax of 10 per cent. were laid on the income of the three brothers, we shall see that it would be a just tax, but that if it were laid on earnings, it would be an unjust tax.

Consider first a 10 per cent. tax levied according to *income*. The first brother would pay 10 per cent. on his annual income of \$500 a year, or \$50 a year forever. The second would pay no taxes for fourteen years, after which he would pay taxes of \$100 a year forever. The third would pay a tax of \$200 a year for six years and thereafter nothing.

If, in the supposed community, it is possible to "compound" for taxes by paying in advance a sum which represents the discounted value of the taxes, a little consideration will show that each of the three brothers could compound for his taxes for \$1,000; as this sum is the discounted value of the first brother's tax for \$50 a year forever, of the second's tax of \$100 a year, beginning

15 years hence, or of the third brother's \$200 a year for six years.

Applying the tax of 10 per cent. to earnings, on the other hand, the first brother would pay the same taxes, \$50 a year, as in the previous case; the second would pay not only the \$100 a year beginning in fifteen years, but also in the intervening 14 years he would have to pay a progressively increasing tax beginning with \$50. Evidently this tax is far more burdensome than that on income, and if the brother should "compound" for it, he would need to pay a much higher sum, namely, \$1,714. The third brother, on the other hand, would need to pay a tax on the first year of only \$50, this being 10 per cent. of the earnings; in the second year he would pay \$42.50, and so on, in sums decreasing to the last or sixth year. He could compound for these small amounts for only \$158. Evidently the burden of taxes on the three brothers who started out with equal properties would be, under this system of taxes, very unequal. An "income" tax would be just, and an "earnings" tax unjust.

It is true that we are not therefore obliged to use the term "income" in the sense in which I employ it. But the example shows that the concept which I call "income" is so fundamental as to afford the basis for a theoretically just system of taxation, whereas the substitution as a basis of taxation of the concept which I have called "earnings" affords a basis for an unjust system. The question has been often debated whether "savings" ought to be taxed. Our example shows that in ideal justice they ought not. The contention that they ought to be taxed is, I cannot help but think, due to the notion, fostered by a bad terminology, that savings are income.

The question of whether we should use the term "income" in the sense of earned income or in the sense

of realized income, is purely a verbal one and is of small consequence. But even this verbal question may properly engage our attention for a moment. One reason that I personally prefer to use the term "income" when employed alone to signify realized income is that the term earnings cannot be used in the sense of realized income. Therefore if we are to allot to our two concepts (real and ideal income) the two terms, earnings and income, and if earnings can be used only for one of these two concepts, the ideal, there is no choice but to apply the term income to the other. Another and more important consideration is that, given the two ideas, one referring to income which is realized or actual and the other to income which is earned or potential, it would seem that the basic term income should be preferably applied to what is real rather than to what is hypothetical. We have seen that the two concepts called earnings and income are not independent, but that the concept of "earnings" is dependent upon that of "income". The fundamental term income seems to befit best the more fundamental of the two concepts. The concept of earnings is a compound concept. It is compounded out of the concept of income and the concept of capital, for it signifies the sum or difference of two magnitudes, viz., the actual income and the savings (or reverse) which are a change in *capital*.

Questions of terminology can never be satisfactorily settled. Popular usage is almost always inconsistent. Thus the very people who think income must be exclusive of any depreciation of capital will nevertheless include in income the whole of an annuity, especially a life annuity. But it is evident that if a man purchases a terminable annuity, his property will gradually depreciate; each item of the annuity received is eating up the value of his capital, until at the end of the terminable

annuity it is all gone. Of course precisely the same principle applies in the case of any article of capital with a limited life, such as a dwelling-house, or an automobile, or a piano. In all cases depreciation funds do not diminish income unless they are actually paid. In the case of a laborer, his wages constitute a terminable annuity and there must needs be a progressive depreciation of their capitalized value; yet he usually regards all his wages as income. In this case depreciation is not deducted because it is not calculated. Accountants do not capitalize labor power, and therefore their bookkeeping fictions do not enter into the problem of whether or not a laborer's wages are income.

Again the common phrase that a man is "living beyond his income" is variously interpreted. It may mean, translated into our terminology, that his realized income exceeds his earned income, or that his realized income exceeds his money income even when the latter is in wages or other terminable form.

We may summarize our results in the following propositions:

(1) Savings mean the rise of the curve of Figure 2 indicating the course of capital value. Income means its fall.

(2) The alternate savings and income, or rise and fall, are not necessarily equal.

(3) Even when they are equal, as in the case of a perpetual annuity, they are not coincident in time nor do they have the same discounted value.

(4) Any value of capital (such as $M' N'$) in Figure 2, is the discounted value of all its future income (such as $a, b, c, d, e,$), including no savings nor anything else whatever.

(5) The rise or increase of capital value in any

period may be discounted to form present capital value provided (1) it is discounted *instead of* income beyond that period and not in addition to it, and provided (2) it is shifted forward out of its actual place to the end of that period. In this case the capital value at the beginning of the period is the discounted value of the income realized within this period plus the discounted value of the capital value remaining at the close of the period (including therein any increments or savings).

(6) The rise of capital value (or savings) has no existence independently of expected income. Its value depends upon and shifts with (a) the expected income and (b) the rate of interest.

(7) When alternate savings and income or the rise and fall of the curve are not equal, bookkeepers usually make the fiction of equality by adding to the actual income any addition to capital (savings) or subtracting any deductions from capital (depreciation).

(8) This corrected or doctored income I prefer to call not income, but earnings. The concept of earnings is not independent of income but a compound of the two concepts of income and capital. Income, earnings, and savings (or the reverse of savings, depreciation) are three separate concepts of which the first is fundamental and necessary to the understanding of the other two.

(9) Capital is discounted or capitalized earnings only in the sense that the earnings of future years are assumed to keep up at the present rate.

(10) Even if different names be given to the foregoing concepts—if for instance the name income be given to the concept which we have designated as earnings and some other name be substituted for our term “income”—the three concepts and their relations to each other and to

capital will not be affected ; they will merely be differently expressed.

(11) But if such a terminology be adopted (*i. e.* "earnings" be called "income"), we have left no term which has yet been suggested to apply to the first concept which I have called "income". Inasmuch as this concept is the fundamental and important one, it surely deserves a fundamental and important name. This basic concept, moreover, seems as near to the popular idea of "income" as we can attain and still observe the rules of scientific definition. If it be true that so fundamental a concept has thus far gone unnamed, this fact must be interpreted as indicating that the fundamental theory of discounting this unnamed magnitude to obtain capital value has never been clearly understood. The concept is unnamed because unappreciated. As soon as we perceive its important rôle, we must needs christen it. Personally I care little how we christen it if only its rôle and relation to capital, and to what has been called earnings and savings, are clearly understood. Such clear understanding is unfortunately not as yet a realized fact among students of the subject.

ARE SAVINGS INCOME—DISCUSSION.

WINTHROP M. DANIELS: In opening the discussion upon the paper that has just been read I feel obliged to preface my remarks with an expression of the great obligations which we are all under to its author. Not only in this instance but in others he has clarified economic problems and concepts; and in the progress making for conceptual freedom in economic theory we are all his debtors.

While I am forced to dissent in part from the specific contention which he raises in this paper, he has by his treatment of the income concept brought out the sharp contrast which from one standpoint exists between items that are commonly blanketed under the term—Income. When the income of an individual or nation is expressed in money terms, the sum covers certain items that connote enjoyment realized during the income period, and also other antithetical items which connote just the reverse—abstinence from present enjoyment. From one standpoint these two sets of items are just the opposites of each other. Is there then any justification for including both in the same concept? Or should we follow Prof. Fisher and make income synonymous only with enjoyment-items?

I believe that there is ample justification for including these seemingly opposed sets of items under a single term—Income. The two sets of items are wholly congruous, if we are trying to measure, not the enjoyment of wealth realized within a certain period, but the net command obtained over wealth within the period in question.

This, I take it, is the concept of income which the accountant and the business man—and generally the economist—has in mind when he speaks of Income. The economic man is not merely a vitalized hedonic meter, interested in measuring only the pleasurable current flowing through his sensorium. He is also a human being interested in the control of new wealth which during a given period comes under his command, whether it be taken in actual enjoyment or in an accretion to his capital and thus destined for actual enjoyment at some future time. He therefore accounts both his savings as well as his spendings in a year as integral parts of his yearly income.

That this is the popular and instinctive concept of income is neatly illustrated by one of the last injunctions Boswell records himself as receiving from Dr. Johnson. "He said, 'Get as much force of mind as you can. Live within your income. Always have something saved at the end of the year. Let your imports be more than your exports, and you'll never go far wrong'."³ Much has been said about the definition of income. I submit that Johnson was a competent lexicographer and generally used terms in their accepted meaning; and clearly in his view of the matter, savings are a part of income.

Professor Fisher contends that savings or accretions to capital, are not discounted in the same way as items of income destined to contribute to enjoyment. I am unable to see this. I cannot see that the economic destination of items to accrue in future will alter the discount process whether such items are to be converted into enjoyment, or are to be added to capital. Whether such items are to be detached from capital and made to enhance current en-

³ *Boswell's Life of Johnson*, Birrell's edition, Vol. VI, p. 61.

joyment, or whether they are to continue attached to the parent stock will not affect the method or result of discounting them. That depends wholly on their distance from the present, and on the prevailing rate of time discount.

One other objection which I have to Prof. Fisher's narrowing the concept of income to enjoyment realized in the income period is that it sorts out one aspect—and that a partial one—of Income, and decorates this aspect with the sole and exclusive right to the name—Income. To do this is hazardous. It throws unnecessarily out of alignment economic and legal terminology where an interpretation clause would avoid the difficulty. I am not arguing that good law is necessarily good economics, or *vice versa*. But this much is certain. The legal concept of income cannot be made to square with the restricted content Prof. Fisher allows to the term. Thus in the Index to Howes's useful little manual on "The American Law relating to Income and Principal" the first four entries relate to "Accumulated Income". According to Prof. Fisher, it is a misnomer to speak of accumulated income.⁴ If, for example, trustees are permitted temporarily to hold back income from the beneficiary, such sums remain income in the eye of the law, although retained and accumulated for some time.⁵

To mention another unfortunate deduction which flows from Prof. Fisher's view. In the instance cited in his book of an income tax imposed on three brothers, Prof. Fisher inveighs against imposing any such tax on the

⁴ "Services and satisfactions, unlike wealth and property, can exist only as flows; a fund of either is impossible". *The Nature of Capital and Income*, p. 52. In this treatise Professor Fisher identifies income with the "services of wealth".

⁵ Howes: *The American Law Relating to Income and Principal*, p. 59.

brother who receives a legacy of \$10,000 and allows it to accumulate until the capital is doubled. Only after the principal has doubled and its yearly yield is devoted to actual enjoyment, is the tax, in Prof. Fisher's view, justifiable. From the standpoint of financial equity this proposal stands condemned. To exempt from an income tax altogether an individual whose power to support himself and family is thus constantly increasing, while imposing the tax on those of lesser means who do not thus augment their accumulations, is, I submit, a *prima facie* case of injustice sufficient to bar the restricted concept of income from being adopted in the financial glossary.

FRANK A. FETTER: We are discussing a question of terminology but not a question "merely" of terminology. In "the bright lexicon" of the newer economic criticism there is no such word as "merely" in application to questions of terminology. Against such a word the literature of economic thought gives many warnings in the fallacies resulting from ambiguity of terms. "Merely" terminological differences soon appear in the form of real and practical differences when ambiguous terms are applied in the discussion of practical questions. Even in this case Professor Fisher has promptly deduced from his peculiar concept of income some peculiar conclusions as to the justice of certain forms of taxation; and at a time when economic theory and financial practice alike are leading to the taxation of the unearned increment on land held for speculation, Professor Fisher is led to condemn both this theory and this practice.

Professor Fisher confesses that his conception is opposed to the usual view of economists, of business men, and of accountants, and that therefore the burden of proof rests upon him. More than that, his denial that

additions to capital are money income is a paradox of the sort that economics is now generally rejecting. It is just such a paradox as that "rent does not enter into price", or that "savings are at once consumed", or that "demand for commodities is not demand for labor"—such paradoxes, once considered to be the quintessence of economic wisdom, are now, by economic criticism, being relegated to the lumber room.

The very title of Professor Fisher's paper presents a terminological question, and is misleading. The subject is not so much "Are savings income?" as, Is an increment in the value of capital in a given period to be considered money income? Whether or not that increment of capital, when it is at the disposal of the owner, will be saved or spent is a later question and not involved in our present inquiry. Our question and our attention may be confined to the period within which the income accrues and matures. Professor Fisher's critics contend for the almost universal business usage of the term income as an increment of business power expressed in money value. What is the kind of income here under discussion? The term "income", rightly or wrongly, is applied to two (indeed, several) different things. We contend that the question here is of money income, whereas Professor Fisher has his attention fixed upon a different kind, namely, psychic income. He apparently agrees that capital as a business concept is the anticipated value or present worth of future psychic incomes. And he therefore concludes that in the period of its acquisition this capital is not money income to its owner. This is a *non-sequitur*.

In Professor Fisher's paper is meant by income evidently psychic income or value of the gratification. He presents us with a diagram which depicts the larger part

of the argument in his paper. But what do those lines mean? In themselves they are but chalk marks. The lines *a*, *b*, *c*, *d*, and *e* in his diagram represent the income when it is detached and converted into enjoyment, when, in so far, the capital ceases to be capital, and is converted into a present realized psychic result. At that moment the line does not represent a monetary income, but a monetary outgo. He is looking at the end and ultimate goal of the valuation process, whereas the business man is estimating the objective income, the money value accruing in the period, regardless of whether that money will in the next period be saved or consumptively spent.

The chief reliance of Professor Fisher in his rejection of common practice and common judgment is undoubtedly his belief that the increments of capital value of future periods are not discounted from the present moment as is the psychic income. It may be said that the question is not as to the discounting of future incomes, but as to the view to be taken and the term to be used in reference to past and present increments of value. He says that the increment of value up to date is not income. We say that it is, and, of course, if it is saved, not spent, and is added to capital, it will continue to contribute its portion to the subsequent increments of capital. It is this estimate *up to date* in any accumulative period that is in question here. Treating the past increments of capital as income simply recognizes the increments that have accrued to the moment.

But the capital sums of an accumulating capital, taken at different points of time, are the actuarial equivalent one of another, when viewed from the present moment. The money income at the moment it occurs is the actuarial equivalent of a later larger money income that will result from the saving of the present monetary income.

With this thought in mind it is evident that the incomes *a, b, c, d, e* of the diagram can be treated as Prof. Fisher treats them only on condition that they be consumptively used; in other words, that they be converted at that moment into psychic income. If they are kept by the owner and used normally and rationally, they accumulate in the hands of the owner. If Professor Fisher transfers them to another capital account at that moment, it is simply concealing beneath a new bookkeeping entry a source of additional income for the future. If, therefore, incomes *e, d*, etc., are not detached from the owner's capital, but merely given another entry in the accounts, the curve *N n* would be extended toward the right and upward. The money income of the earlier periods, being saved and added to the capital sum, become themselves the source of new increments of value in the succeeding period. And this shows again that the detached incomes of which Professor Fisher speaks, must be not money incomes, but money outgoes, consumptive expenditure of a part of the capital value.

Indeed, there is here seen a difference between Professor Fisher's mode of conceiving of the problem of income and the mode in business calculations. Professor Fisher is thinking of the income as subjective; business deals with income as objective or as objectively expressed. Professor Fisher thinks of the income as occurring only when it is detached from the capital, a conception true at the moment of monetary expenditure and psychic income. Business thinks of the income for the most part as occurring when it is attached to the owner's capital, a conception true of the monetary income. These two conceptions have perhaps the relation that Professor Fisher elsewhere calls an interaction. Business practice, the logic of which we are defending, treats the income

as occurring within the given period in which it either attaches or is enjoyed as usufruct. When a portion of the capital is spent for gratification, that much money value is detached and becomes psychic income.

It must be recognized that the capitalistic estimate and expression of incomes is not an ultimate psychological analysis of the problem of value. It is an estimate of income in objective terms, but an estimate at once logical in its place and indispensable in practice,—a statement probably true of the whole “cost of production” conception when rightly limited and understood. Professor Fisher’s use of terms flies in the face of usage. While thinking of the income as detached value, he ignores the significance of the present and past attached value. Once a disbeliever in psychic income, he now, with the zeal of an apostate, becomes intolerant of any other conception even when monetary income is the subject under discussion. Is a thousand dollars in money received as a gift not an income when it is received? Is a ten-thousand-dollar estate received by legacy not an income to the beneficiary? Is a hundred dollars earned within this month by personal service not income because it is not yet enjoyment? Is the hundred dollars interest received from a mortgage or the hundred dollars rental received from a farm not income? To all these receipts Professor Fisher must deny the name of income for the same reason he has denied it in his discussion and in his book. He does so deny, defending a conclusion out of harmony with common usage and theoretical expediency, a conclusion only to be accounted for by his ambiguous use of the word income as both monetary and psychic.

A. W. FLUX: I desire to express my appreciation of the valuable aid rendered to the clear understanding of the subject by the modes of presentation adopted by

Professor Fisher, but wish at the same time to call attention to two points which have been mentioned in the course of the morning.

The first is Professor Fisher's treatment of depreciation. I may suggest that, as the depreciation fund is a mere question of accounting, it is no new capital, being merely the recognition of the fact that the original capital had not been kept intact. It is convenient to proceed as if the opposite were true, but merely convenient. The disappearance of the capital originally present, and the creation of a depreciation fund, are concurrent processes in reality. Hence some part of the argument based on the treatment of depreciation as something set aside from time to time cannot be conceded to have its apparent force. I wish to direct attention also to a part of Professor Fetter's claim, in which he seems to lay stress on that aspect of the changes in the fund of capital which is concerned with the building up of the interest from the parent stock, as well as, or even instead of, the view presented by Professor Fisher, of a change in which the approach of the time of realization of the services which the capital is expected to render, affects the valuation placed on that expectation. Professor Fisher deals with the changing capital values as related to future utility under varying discount, while Professor Fetter seems to desire to regard the changes as due to influences proceeding from the opposite end, creating income by applying capital in effective methods. It appears as if, in this case, the coördinate importance of the consideration of cost and utility, which Professor Fetter will not admit in the value problem, is nevertheless the idea the validity of which in the field of the morning's discussion he is prepared to champion. I hope the omen is significant of a change of views in regard to value and cost.

JOHN FRANKLIN CROWELL: The value of this distinction between kinds of income is seen in comparing credit with cash assets. Credit income is book income, the accountants' expression for net income at the time of making up his balance sheet. Cash income is bankable assets, on which one can actually draw for cash expenditure. The credit income has first to be converted into cash or its equivalent. The distinction appears clearer when we apply it to a given case. A business man says, "My year's net income is \$40,000", while part only of it is in cash assets, and most of it in inventoried goods not yet converted into cash. But when the goods are once "detached", that is, turned into cash by sale, their real income character is apparent. For this reason much importance has to be attached to the part which detachment plays in determining real income. For it is thus that capital is transferred or transformed into income. The undetached gains of business are still capital. Detached, they stand on the other side of the account and become a liability—a real income against which one may draw in expenditure.

MAURICE H. ROBINSON: While I find myself in general agreement with the conclusions which Professor Fisher has reached as a result of his investigations into the nature of capital and income, I think it would be a serious mistake in theory as well as in logical method to attempt to deduce from those conclusions the principles that underlie an equitable system of taxation. An equitable system of taxation is, of course, one that distributes the cost of administering a government equitably among the members of the state. Such a system is not necessarily one that takes equal proportions of all incomes. It may be that in certain cases and under certain circum-

stances an equitable system will take a larger proportion from the incomes derived from capital than from those derived from labor; or from incomes derived from capital invested in certain kinds of productive enterprises than from capital invested in certain other kinds. President Hadley used to define an equitable system of taxation as one in which the costs of government are placed upon the shoulders of those receiving its benefits in such a way that the respective burdens can be borne with equal ease. I confess that his views appeal to my own standards of equity. Such a system would justify a progressive income tax and the omission of the smaller incomes altogether. It would not, it will be observed, take equal proportions from all classes of incomes. In other words, an equitable system of taxation is one that is based upon social ideals of equity as tested by practical experience in their application and not upon the exact determination of all incomes and their taxation on a percentage basis. Those who hesitate to accept the results of Professor Fisher's analysis lest they be surreptitiously led into serious errors in taxation or social reform may rest assured that any errors that they may hereafter commit in these fields will in the final analysis be found to be due, not to their ideas regarding the nature of capital and income, but rather to the acceptance and application of untenable theories in regard to these subjects. On the other hand, it seems to me that Professor Fisher would make an equally serious mistake in theory should he assume that the unequal taxation of incomes is on that account necessarily inequitable.

AGRICULTURAL ECONOMICS.

ROUND TABLE DISCUSSION: T. N. CARVER, *Chairman.*

T. N. CARVER: Inasmuch as this is the first round-table on Agricultural Economics, since it is, in fact, the first time the subject of agricultural economics has been recognized by the American Economic Association, it has seemed wise to devote most of our time to-day to the consideration of a preliminary question. That question may be stated as follows: What is agricultural economics, what does it include, and what place ought it to have in a college course? It seems desirable to give some time to this question for the reason that there is some disagreement among men who are giving courses in this field as to what they ought to teach.

In order to introduce the subject, to show that the economics of agriculture is a very old subject, and to furnish a basis for further discussion, I should like to call attention to the original meaning of economics as it was treated by Xenophon and Aristotle. Both treated it as the science and art of supplying means for the support, first of the household, and secondarily, of the state. Xenophon's economics was simply a treatise on the management of a household, but it was an agricultural household. It may therefore be called the first treatise on agricultural economics. His discourse on the Revenues of Athens was his only contribution to public or political economy. Aristotle also, in various scattered passages, discourses on the means of providing support for the household. To the agricultural industries of tillage, pasturage, poultry and bee keeping he gives the name

natural economy. Trade and commerce, as well as working for hire, he treats as unnatural.

Both treated the economics of the farm and the household from the private rather than the public point of view, though the question of providing means for the support of the state was also discussed. In modern times, however, the public point of view has come to be more emphasized, mainly because the early mediæval and modern economists perceived that the state could secure ample means only when industry in general was prosperous. The question for the economist and the statesman therefore became, how to make the whole country prosperous. This, I take it, is still the problem. We are still looking at the agricultural industry from the public point of view. We are concerned to know the conditions which will make for national prosperity through the prosperity of its most important industry or group of industries, namely, agriculture. However, this is merely the expression of an individual opinion which may serve as a text. We shall doubtless get real enlightenment from the remarks of the gentlemen who carry on the discussion.

KENYON L. BUTTERFIELD: To my mind the field of agricultural economics cannot be properly defined except by approaching it from the standpoint of the rural problem. The rural problem stated in broad terms is the preservation of the class status of the farmer, industrially, socially, politically. Agricultural economics will consider the industrial features of this problem.

On the other hand, agricultural economics must be considered apart from farm administration, which has to do with the business management of a farm by the individual manager or owner.

It is important, therefore, to segregate agricultural economics from the other departments of rural social

science on the one hand, and from farm administration on the other hand. At the same time the differentiation must not be too sharp. The social and political relationships of the industry must be constantly kept in mind in studying industrial questions. So too, the student of agricultural economics will consider very carefully and in detail the business problems of the individual farmer. I think, indeed, that the teacher of agricultural economics, while delimiting his field pretty carefully, and while having a thorough grounding in economics, will also be a careful student of technical agriculture and farm administration as well as of rural social science as a whole. On the other hand the teacher of farm administration should be first of all a technically trained man, but he ought also to have a thorough comprehension of agricultural economics.

Agricultural economics as thus defined should be a university study, but it should also be given in the agricultural courses of the land-grant colleges and if possible required of all students. Farm administration for such students is the more immediately practical, but they should also have the broader point of view which will come from studying agricultural economics.

With respect to subject matter, in my opinion there should be a careful study of the economic characteristics of the agricultural industry; furthermore, the relation of agriculture to other industries should be carefully worked out. But I think that for most students in our agricultural colleges the best approach to the subject will come through descriptive courses outlining the broad industrial problems of agriculture as they exist to-day.

I should also like to emphasize the importance of a thorough-going, intensive, and long-continued inductive study of the agricultural industry and of the concrete problems connected with it.

EDWARD D. JONES: On the subject assigned to me, *Economics of Agriculture in the Work of an Economist*, I would like to say a few words about its use to a teacher, its use to a student, and the opportunities for investigating agricultural economics which are presented by the agricultural schools.

We are in a period when economists are applying themselves to the collecting of data in many fields never before worked. A few years ago J. E. T. Rogers criticised the science by saying, "Two things have discredited political economy—the one is its traditional disregard for facts; the other its strangling itself with definitions." In the earliest period in this country economics was under the influence of deductive reasoning, and later of the German historical school. More recently its students have scattered in every direction; at first to study finance, money, banking, and transportation; then to make thoroughgoing technical studies in connection with various economic problems; finally to investigate in the field of production in agriculture, manufacture, and commerce wherever there was promise of discovering valuable principles or advancing the knowledge of the structure and processes of industry. As in physical science every student, no matter how limited in resources, is expected to have some sort of a laboratory, so in our science, blessed with a most extensive laboratory for observation, if not experiment, every student should be urged by the force of professional opinion to first-hand investigation along some line. The merits of agricultural economics, as a field for such investigation, are, the possibility of carrying it on at all places, the unusual aid offered by government, the variety found within the agricultural industry, the intellectual refreshment offered by passing from general to concrete facts, (few books are more fascinating to an economist

than the Yearbooks of the Department of Agriculture), the tendency of the subject to check undue development of the distinction-spinning habit of mind, and finally the obvious and abundant usefulness of the work.

The besetting difficulty with the college student who is endeavoring to master the principles of economics is his ignorance of the industrial organism and process which these principles are intended to explain. The result of this is that the principles seem unreal and the student often obtains an exceedingly fleeting hold upon them. In conjunction with instruction in the principles, or immediately afterward, there should be provided studies of a more concrete nature, investing these principles with reality by showing their relation to concrete facts, either inductively developing them from concrete cases or applying them to such cases. As a candidate for performing such a function in a curriculum of economics, agricultural economics presents the advantages of involving an easily understood contact between physical and economic forces, of giving opportunity for the study of commercial geography or *warenkunde*, if desired, of involving in itself the utmost variety, of presenting the case of a truly productive industry of thoroughly wholesome economic tendencies, and of leading easily to some of our most important national economic problems such as irrigation, forestry, and the public land problem.

In conclusion a word upon the agricultural colleges. The Morrill Act of 1862 and the Hatch Act of 1887 created our system of agricultural colleges and experiment stations. In 1890 the second Morrill Act offered a sum, beginning at \$15,000 and increasing to a maximum of \$25,000 annually, to any state or territory which should institute teaching in agriculture, mechanical arts, English, mathematics, physical and natural sciences, and

economic science, the latter being specifically mentioned in the Act. As a result of this legislation there were in 1905, 43 institutions giving instruction in "economic science", 14 spending less than \$1000, 13 spending between \$1000 and \$2000, and 16 spending over \$2000. These institutions possess advantages for the carrying on of investigation along certain lines in agricultural economics. The opportunity should not be overlooked by the friends of economic science. The members of this Association should not miss an opportunity to recommend for such positions men with ability to investigate the middle ground between agriculture and economics and should not fail to give to all worthy investigations encouragement and recognition.

R. P. TEELE: I have been asked by the chairman to present the conception of agricultural economics held by the U. S. Department of Agriculture.

There is in the Department no bureau nor division which is charged with the study of agricultural economics, as such. However, every bureau and division has, or should have, constantly in view the economic value of the work which it is doing. Each studies certain elements of agricultural economics as a part of its own science, but such a study does not require the defining of agricultural economics, and, therefore, we have in the Department no authorized definition.

However, I find that the Office of Experiment Stations of the Department has published a definition and outline prepared by the Committee of the Association of American Agricultural Colleges and Experiment Stations on *Methods of Teaching Agriculture*. This Association represents practically all the agricultural colleges and experiment stations in this country, and this definition, coming

from such an association, is backed by a considerable weight of authority. The definition and outline follow:

SYLLABUS OF COURSE IN RURAL ECONOMICS.

DEFINITION	Rural economics treats of agriculture as a means for the production, preservation, and distribution of wealth by the use of land for the growing of plants and animals. It may include the development of agriculture as a business (history of agriculture), as well as the facts and principles of farm management under present conditions.		
HISTORY OF AGRICULTURE.	Development of different forms.	{ Grazing. Plant industry. Mist husbandry. Special farming.	
	Agriculture in different periods (with special reference to land tenure, equipment, labor system, prominent products, social and financial condition of farmers).	{ I. Prior to 500 B. C. (Egyptian). II. 500 B. C. to 500 A. D. (Grecian and Roman.) III. 500 A. D. to 1500 A. D. (Western Europe—feudal system). IV. 1500 A. D. to 1800 A. D. (Especially in Great Britain.) V. 1800 A. D. to 1900 A. D. (Especially in United States.)	
FARM MANAGEMENT.	Capital.....	Land.....	Value as determined by location, suitability, etc. Purchase, rental, and sale.
			Cost of maintenance. { Taxes. Rents. Interest.
	Equipment.....	Nature (as related to particular kinds of farming).	Legal requirements.
			{ Buildings. Fences, roads, wells, drains. Implements. Live stock.
	Labor.....	Value.	Cost of maintenance. { Taxes. Insurance. Repairs. Feeding.
			Legal requirements.
	Production.....	Methods and cost (with reference to different systems of farming).	{ Systems (wage, share, tenant). Contracts, including methods of payment. Cost, as affected by labor supply, use of machinery, nature of work, etc. Management.
	Marketing.....	Preparation for market. Choice of market. Transportation. Method and cost of sale. Legal requirements, e. g., weights, measures, packages commissions, inspection.	
Records and accounts	{ Crop records. Feed and milk records. Breeding records. Inventories. Bookkeeping.		

In my opinion this definition is too narrow, since it limits rural or agricultural economics to the field of the individual farmer, excluding the relations of the State to agriculture, and all outside factors which have an influence upon the agricultural industry. Therefore, I propose the following definition:

Agricultural economics treats of the principles which guide the individual farmer in the apportionment and use of his means of production, and the factors which influence the production of wealth by means of agriculture, or the distribution of wealth produced by this means.

This definition excludes, on the one hand, agricultural technology; and, on the other hand, those social questions which, however important in a study of the whole subject of rural life, have only a remote bearing upon the production and distribution of wealth.

Having defined agricultural economics in this way, the question whether this or that should be included must be determined by its influence upon the agricultural industry.

In a course of study those factors having the greatest and most evident influence upon the agricultural industry should be taken up first, going farther and farther afield as the time to be given to the course increases. The field for research work would be on the outer limits of the field for teaching, tracing the influence of various factors upon the business of the farmer. Looked at in this way agricultural economics does not deal with a given body of subject matter; it looks at the whole field of human activity from a given standpoint—the effect upon agriculture as a means of producing wealth, or upon the distribution of wealth produced in this way.

F. W. BLACKMAR: Agriculture in the arid region where tillable land is relatively scarce furnishes many lessons of intensive cultivation. The first expense of

getting water upon the land and the fixed charge for maintenance induce farmers to make each foot of soil yield the largest possible return. On the land where several crops are grown in a single year, the tillage and harvest become a steady business uninterrupted by storms or cloudy weather. As the soil is new and fertile, and as the water itself usually carries sufficient fertilizer to replenish the waste, the crop is sure. As the amount of tillable soil is small in proportion to industries the demand for products makes a good market. Under such circumstances farming becomes an investment of capital with a constant and safe return on the investment. Economically, farming partakes of the nature of manufacturing. The prices of land become fixed by the income and reach high marks, some of them in well developed orchards reaching the fabulous sum of \$2000 per acre. The conditions lead to a scientific study of soils and application of water; to a study of the adaptation of crops to the soil, and a careful consideration of methods of cultivation.

The need of agricultural schools and experiment stations is great, and where they have been instituted they have been of great service. The principal things to be taught are analysis of soils, methods of irrigation, amount of water used, the processes of tillage, caring for crops and their marketing, feeding of stock, and the question of repair of waste of lands.

One of the most useful crops in this region is alfalfa, the cultivation of which began in California and gradually extended eastward to eastern Kansas and Nebraska. Its value will soon be recognized in the middle west and on the Atlantic coast. It has power in excess of other clovers to rejuvenate and to restore soils that have been worn by heavy croppings, as it takes the nitrogen from the air and restores it to the soil. It is especially valuable in

the arid region as a forage plant to supplement pasturage on the range. It thus makes stock raising a stable industry by preventing depletion from starvation and freezing of stock. The arid region to-day is a resourceful field for experimentation in agriculture. Its importance is overlooked from the fact of the immense tracts of mountain and desert that may not be brought under tillage. Yet the development of this country will exceed all previous estimates. In the region once called arid there are now over 10,000,000 people and 50,000 miles of railroad. There are over 10,000,000 acres under irrigation. It is estimated that at least 100,000,000 acres may be eventually placed under irrigation. The number of acres will be greatly increased by the process of "dry farming", under light rainfall. It is safe to estimate that through agriculture, manufacturing, transportation, and mining the district once called arid, extending from Eastern Kansas to the Pacific slope, will support a population of 100,000,000 people. Under such conditions the study to preserve the soil is a momentous question, for there is no reason why land should wear out if it is scientifically tilled.

JOHN G. THOMPSON: As a basis for this discussion I desire to recall to our minds the position taken by Adam Smith and by Ricardo, respectively, in regard to *wealth* and *value*. The former emphasized, though not exclusively, *wealth*—the *production* side of industry. Ricardo, however, distinguished sharply between *wealth* and *value*, and emphasized the latter almost exclusively. That is, Ricardo concerned himself with *value* and with *distribution*.

The limitation in the supply of economic goods which afforded a basis for value was, according to Ricardo, a

natural limitation chiefly. Monopoly was the exception and hence not to be regarded. Since the days of Ricardo, however, conditions have changed, and monopoly or artificial limitation has advanced far in respect to labor and capital. Agriculture, representing the third factor in production, has, on the contrary, remained essentially unmonopolized and unorganized—as recently pointed out with admirable clearness by Dean Bailey, of the College of Agriculture, Cornell University.¹ There are, however, indications that the farmers are awakening to the advantages which organization and control of competition may afford. We have been hearing recently of “farmers’ unions”, of “controlled marketing”, of “minimum prices” for farm products, of “restriction of output” (reduction of acreage), and of “shorter working hours” for the farmer. We hear the term “scab” applied to the non-union or independent farmer—the “dumper” who ruins the market by overloading it. We even hear, I am sorry to say, of violence, emanating from some source and offered to the independent farmer. We hear such highly significant expressions as “the crop-rich but money-poor farmer”, and “the market side of farming is the most important side”.

The marked tendency toward the improvement of agriculture on the technical side, and this tendency of the farmers to thus limit competition among themselves constitute the two most important phases of development in reference to agriculture in the United States at the present time. The former tendency, which is represented by the organization of technical agricultural schools from the university down and by numerous technical agricultural journals, corresponds in a general way to the phase of industry emphasized by Adam Smith, that is, *production*,

¹ Century 72: 410-416 [July, 1906].

the larger creation of *wealth*—literally the ‘wealth of the nation’. It has thus—and rightly—commanded the widest approval and support both of the public at large and of the state in its organized capacity. The tendency among farmers to limit and control competition, on the other hand, corresponds to that phase of industry emphasized by Ricardo, that is, the creation, not of *wealth*, but of *value*, and which has to do with distribution rather than with production. It is pointed out by those who participate in this movement that mere improvement in technical production will not necessarily help the farmer, and in proof of this assertion they point to the fact that a short crop often brings the farmer a greater value than a bounteous crop. Indeed, open opposition is sometimes expressed toward the technical agricultural schools on account of their attempts to increase production. This tendency among farmers to limit competition has attracted far less attention than the movement to improve the technique of agriculture, and naturally enough has not received the same commendation from the public. Nevertheless, as a class movement, it has enormous potential significance; for the proper balancing of the interests of agriculturists as a class and of the public at large requires that neither the value side nor the wealth side of agriculture be neglected.

Finally, this analysis seems to throw some light upon the general question of the meaning of the term *agricultural economics*. It appears that generally speaking we should contrast *agricultural economics* with *agricultural technique* rather than with economics in general or with some other so-called special branch of economics—as *railway economics*. That is, we should emphasize the word *economics* rather than the word *agricultural*.

W. A. PECK: The work of the office of Farm Management in the United States Department of Agriculture has been divided into four sections, each having a distinct line of investigational work. One of these is the section of farm economics, in which a detailed study of farms is made. This study treats the farm and the lines of productive activity as definite units, and deals with the economic relation existing between the factors of production, land, labor, and capital. It is to this phase of farm management work—the detailed study of farms—that I wish to call your attention. It is this phase of farm management investigations that is so economic in character, and which, if carried to a successful conclusion, will provide data for putting farms under a good business organization, and at the same time provide economists with material for working out fundamental principles to be used in our educational institutions, and also in developing and maintaining an intensive agricultural industry.

This detailed study of farms consists in getting at the exact daily distribution of labor. Every half hour of labor for every individual worker as it is distributed over the various lines of activity is secured. Daily statements of all sales and expenses, feeding rations, performance records, pasturing notes, etc., are secured. Complete farm inventories are made, farm fields are accurately surveyed, and the acreages in the different crops determined. This work is carried on in coöperation with the best farmers that can be found. The farmers are expected to keep only the crudest records, all the tabulations being made by the office of Farm Management, at Washington. The Department furnishes the forms used by the farmers, gives the franking privilege for sending in reports, and at the end of the season or year

furnishes the farmer with a tabulated statement showing the results of his management. Only those farmers who are interested in getting at the results of their own management are encouraged to take up this coöperative work.

To bring out the relation that the purpose of this detailed study of farms has to some of the practical farm problems a few suggested concrete examples may be of interest. The purpose, as has been stated, is to provide data for bringing all parts of the farm into their most economical relationship—in other words, to combine land, labor, and capital goods in connection with managerial ability so as to produce maximum net returns. This statement of purpose embodies the law of diminishing returns, and many other economic principles. Treating the farm as a unit—what is the proper size of a farm, just how much capital should be invested in live-stock, in fences, buildings, machinery, etc., and in what varying acreages should the crops be grown? In plowing what size plow should be used, how deep to plow, etc.? In producing a corn crop how many times to disc or harrow, how many times to cultivate, what machinery to use? In producing a pound of milk or butter fat how much should be invested in a cow, what kind of feed should be fed, and how much of each kind? Then there are the competing and supplementary crops—when do crops or lines of work compete, and when are they supplementary?

It will be observed that these questions suggest a relative study—that the point of diminishing returns or greatest utility of any given line of production can be determined only by knowing the relation that exists between the different factors of production. The question of the proper combination of these factors must be answered for practically every distinct line of farm activity,

and the farmer's problems are intensified by the uncertainty of the natural elements, as climatic changes, soil variations, the labor supply, etc., and the elements affecting the distribution of marketable products.

It will be apparent that no distinct line separates farm management from agricultural economics. Practical farm management problems form the basis for the study of economic principles. Economic principles practically applied to agriculture will materially assist in perfecting the farm organization and developing intensive rather than extensive farming, both in the production and distribution of products.

EDWARD C. PARKER: The subject matter for Agricultural Economics should be chosen according to the class of students to whom the subject is to be given. If agricultural economics is to be offered as an advanced course of general interest to academic students, it is my opinion that the subject matter should not be of the same nature as that offered to students in agricultural colleges who are fitting themselves to be farm managers, editors or experiment station workers. A large part of pure economics as taught in the elementary courses has a direct relation to the subject of agriculture. In studying the factors of production land is thoroughly discussed, and the law of diminishing returns and rent are based almost entirely upon agriculture. The agricultural student should, by all means, begin his study of business with the study of economic theory, and following this logically he should study current economic and political movements which affect his business. The following topics are suggested as being well fitted to the needs of agricultural students in advanced courses: 1. The acquisition of land in the United States; 2. Population and food supplies in the

United States; 3. Crop statistics and their use; 4. Government reclamation and drainage service; 5. Tariff and the American farmer; 6. Country life education; 7. Land tenures, ownership and leasing; 8. Speculation in farm products; 9. Taxation of farm property; 10. Mutual insurance; 11. The marketing of farm products, including a discussion of coöperative and organized movements among American farmers.

Having studied economic theory and current economic and political movements affecting agriculture as an industry, the subject of farm management can be taught with better results than in the case of students who have not received such preliminary training as outlined. Farm management should be taught from the point of view of the practical farm manager rather than the point of view of the economist who studies and observes agriculture as an industry, and is rarely conversant with the principles of farm management and their application. The following topics are suggested as suitable for a course in farm management: 1. Opportunities in agriculture as compared with other industries. 2. Cost of production studies. 3. Extensive, diversified and intensive systems of agriculture defined. 4. Operating expense, gross receipts and net receipts of farms under various systems of management. 5. Factors which influence the most profitable size of farms and the system of farming. 6. Over-capitalization and under-capitalization in agriculture; relation to profits. 7. Relation of crop rotation and live stock to farm management. 8. Planning farms. 9. Farm labor. 10. Usefulness of farm accounts.

The discussion of these subjects and their application to the management of farms would rarely be interesting or beneficial to the general student. A general course in Agricultural Economics similar to courses offered in

Money and Banking, Public Finance, and Railroads should, in my opinion, consist of material of a more historical and general nature than the outline I have presented.

DAVID KINLEY: The field of agricultural economics, like Gaul, may be divided into three parts: First, those portions of general economics which are of interest to the farmer as a business man, in the same way that they are of interest to other business men. Such, for example, are the general subjects of taxation, transportation rates, the tariff, the money question, and so on. The second portion of the field may properly be called the economics of agriculture, and comprises the economics of farming considered as a private business. Under this division we would discuss such topics as the organization and management of the farm. The question to be answered here is: How can the business of this farmer or that farmer be so conducted as to yield him a net profit? This is a division of the field of private industrial economics, and is to be compared with the study of any other business, such as that of a railroad corporation, from the same point of view. In this field also we would discuss such topics as the comparative cost of production of beef, for example, in Illinois and Argentine. It is a matter of considerable importance to the Illinois farmer if Argentine beef can be sold in Europe at a smaller price than the American beef. We are bound to inquire into their technical methods of production and marketing in order to change ours, if necessary.

We all know, however, that in farming, as in other lines of business, a course of action that may yield a profit to the individual or the class may not be in consonance with the public welfare. This thought leads us to

the third division of agricultural economics, which I may call the social reaction of private agricultural economics. Here we must inquire into the effects produced on the public welfare by particular systems of farming, and insist that these shall be adjusted so that they shall at any rate not militate against the social welfare. We would be bound to consider in this division such matters as tenant farming, the impoverishment of the soil, the movement and condition of the rural population, and so on.

These three divisions, of course, are not sharply separated. The topics will more or less run into one another. Nevertheless, there is a broad difference in the character of the subjects and the treatment to be given them. Much of the vagueness in the discussion of agricultural economics arises from our failure to separate the second division sharply from the others.

B. H. HIBBARD: If agricultural economics can be accurately defined, there will hardly be room for wide difference of opinion as to the scope and outline. The name "economics of agriculture" would probably be less in need of definition, but the naturalness with which the expressions "engineering economics" and "agricultural economics" are adopted may be argument enough to warrant the use of the shorter terms. Agricultural economics, in the first place, is a branch of economics; it implies a close relationship and acquaintance with agriculture. On its technical side, however, it must be recognized that it is economics and not agriculture; and the economist who undertakes its study will approach the subject in a way entirely similar to the manner in which he would undertake a study of labor or transportation. Farm management and agricultural economics have much in common, but it will probably be found advisable not to merge them.

Agricultural economics is that branch of economics which treats of the industrial principles pertaining to the farmer and his business. This is not an ambitious definition; it assumes that the meaning of economics is already understood. Indeed, it would seem that there should be not only a study of the definition of economics, but of the usual outline course in the elements before undertaking the special study of the principles underlying the business of agriculture. This is for the same reason that a musician studies music before he specializes on operatic or sacred selections; for the same reason that an engineer studies arithmetic, trigonometry, and calculus before specializing in railway engineering, notwithstanding the fact that argumentation and politics may later prove his most valuable stock in trade.

In agriculture we find land, labor, and capital, the indispensable factors of production. We find exchange, distribution, and consumption accompanying and following production. We find the use of money and credit, the importance of taxes; in short, the many-sided phenomena of value permeating the business of agriculture as they do all other businesses. It is not convenient to stop a discussion of the value of farm land and go into the larger subject of value, or rent, or capitalization, any more than it is convenient to stop an orchestra to decide how many beats to the measure should be given in six-eight time.

If, then, it can be agreed that the outline course is needed before the special courses are begun, it may be suggested that the outlines be followed by the history of agriculture. This will be long or short according to the tastes and information of the teacher and the opportunities and facilities at hand. That any well-informed graduate of an agricultural course should be familiar with the history of his science hardly admits of argument.

Closely connected with the history should come a careful comparison of agricultural systems, and a study of agricultural geography. Where but one or two semesters are given it will probably be desirable to go at once from the outline to agricultural economics. It is intended that the courses thus far be of such nature that general science students might find them profitable.

As a working basis the following outline is submitted :

Agricultural Economics.

A. Fundamental Theory.

I. *Land:*

1. Public land becomes private.
Policies of the nation and states.
2. Principles in the early selection of land.
3. The same under later conditions.
4. Size of farms and estates.
5. Usual forms of land tenure.
6. Rent. Relation of rent to value; relation of agricultural land values to urban land values and to other forms of investment.
7. Actual values.
8. Land credit.
9. Land registration.
These suggestive topics will stand much expansion.

II. *Labor:*

1. Historical survey.
2. Present Problems.
 - (a) Social distinctions.
 - (b) Relation to machinery.
 - (c) Wages.

III. *Capital:*

1. Methods of obtaining capital.
2. Amount required, and amount actually in use.
3. Varying forms in which farm capital appears,
e. g. machinery, live stock.

IV. *The coördination of the three fundamental factors:*

1. The farmer usually an entrepreneur, landlord, capitalist, and laborer combined.
2. Intensive and extensive agriculture.

B. Specific questions.

- I. Social conditions.
- II. Farm accounts.
- III. Political power.
- IV. Tariff.
- V. Taxes.
- VI. Transportation.
- VII. Prices.
- VIII. Education.
- IX. Organizations.
 1. Slowness to combine.
 2. The grange.
 3. The alliance and kindred organizations.
 4. Farmers' institutes and congresses.
 5. Fairs.
 6. Coöperative undertakings.
 - (a) Farming.
 - (b) Insurance.
 - (c) Stores, general.
 - (d) Buying special supplies, as twine, machinery, seed.
 - (e) Selling, as cattle, cotton, grain, fruit.
 - (f) Manufacturing (and selling), as butter, cheese, canned goods, packing house products.

H. C. TAYLOR: The point of view taken by Professor Hill surprised me at first; and yet I am ready to grant that in the solution of two important questions at least, his viewpoint may be the proper one. For instance if the young man is deciding whether to be a farmer or to enter the industries of the city, and again when deciding what proportion of his energy is to be devoted to making money and what proportion to improving his mind and in serving the community and the state, other than economic motives may well guide him in his decision. But

having decided to be a farmer and to devote a certain proportion of his time to this business, the economic ideal of the largest total net profit should be the guiding principle.

The outline presented by Professor Hibbard contains the more important topics which should be taken up in the field under consideration. The arrangement is not what I would want to follow, but that is a matter of less importance than the content of the course. Professor Parker's paper brings into the light many of the important details of a part of the outline presented by Professor Hibbard, and the work outlined by Mr. Peck shows us how we are to get the facts for a solution of many of the problems of agricultural production. The proportions in which the factors of production should be brought together in order to get the largest net profit, is the central problem which is now being taken hold of by Mr. Peck and his co-workers.

I wish to call attention to the foreign literature of the subject as indicating the scope of the field of Agricultural Economics. The two best representatives of the Germans in this field are Roscher and Goltz. The former in his *Nationaloekonomik des Ackerbaues* discusses the economic problems of the farmer from the viewpoint of the statesman, whose object it is to regulate and promote agriculture by the proper legislation. Von der Goltz, in his *Landwirtschaftliche Betriebslehre*, deals with the same questions from the viewpoint of the individual farmer. The fact that the subject was divided in this way by these eminent men seems to point to the soundness of the position taken by some of the speakers here this afternoon, and yet I doubt if the results justify this conclusion. Had Roscher devoted more time to agriculture from the viewpoint of the farmer his work would have been of greater use to the practical legislator. Goltz

gave lectures on *Agrarpolitik*, which were later published. Following this example, Professor Conrad and Professor Sering include both the point of view of the farmer and that of the agrarian statesmen in their university lectures on agricultural economics. In France the best representative of this line of work is Jusier, who in his *Economie Rural* and his *Legislation Rural* covers both phases of the subject. The tendency is, I believe, for the man whose preparation is all along agricultural lines to want to divide up the field and take the part he is prepared to work, and for the man whose preparation has been largely along the line of general economics to prefer to deal only with the external relations of agriculture, but as one whose training has been equally in agriculture and in economics I have the desire to work both phases of the subject, for the reason that the one throws much light upon the other; in fact the two are one.

W. D. HOARD: The study of agricultural economics needs, first, well organized knowledge concerning the concrete facts of agriculture and their relation to each other; second, a skillful judgment of methods, in dealing with those facts. With the thinker and farmer everywhere, is seen a lack of this thorough organization of knowledge and method. Of what use is it to attempt to deal with the organized forces of nature with disorganized knowledge and judgment? It is this condition of mind that makes of the professor, very often, a mere abstractionist and the farmer a blind worker amid forces and principles he does not understand. The more simple we can make our definitions, the more comprehensive will be our judgment in dealing with economic problems. To adjust the facts of agriculture to their best agreement, in given results, is the essence of economics. Out of such

study comes the application of the wisest methods. We must know the science of the thing. But abstract science leaves the work undone. Results are not achieved. The real economist unites a knowledge of *why* with the truest judgment of *how*. In my experience as a farmer, I must pay constant attention to a study of methods, keeping in mind strict obedience to principles. I must think and work towards a correct expression of my purpose. I must know what nature is and what I can do with her. Beyond the nature of things, I cannot go. Therefore, to know what to do, I must know the nature of the thing I am dealing with. Unfortunately, the men who are interested in these questions are divided into two camps, the thinkers and the workers. There can be no clear conception of farm economics until they are united in the one person. Both forms of knowledge are necessary to prevent uneconomic thought and action. If I waste fertility—employ two acres, two animals, machines or men, to do the work of one—it is uneconomic. If I do not think, as well as work, constructively, in obedience to a well-defined purpose, it is uneconomic. Thus far, at least, have I gone in the study of agricultural economics.

JOHN M. GLENN: I wish to call attention to the fact that the question of rural economy is one that is likely to affect the city as well as the country. If we can make country life more attractive and livable, we will tend to cut off the stream to the city and to draw out some from the city crowds.

TRANSPORTATION—THE BASIS OF REASONABLE RAILWAY RATES.

ROUND TABLE DISCUSSION: B. H. MEYER, *Chairman*.

B. H. MEYER: In opening this session of the Round Table on Transportation I desire to state briefly the reasons why I selected as the subject for discussion at this meeting "The Basis of Reasonable Railway Rates".

Many years before the railway came upon the scene both common and statute law had declared that the rates of charge for public service must be reasonable. The element of reasonableness was retained as one of the common and statute law provisions governing railway rates when railways were first introduced. Numerous courts have interpreted these provisions of law, but one looks in vain through laws and decisions for anything like a definite and tangible rule for establishing reasonable railway rates. The empirical methods of the rate makers of the railway companies afford only incidental assistance in reaching a decision with respect to the absolute reasonableness of a rate. The risk, commercial conditions, competition, what the traffic will bear, and all the other well-known factors in empirical rate-making, when taken by themselves, do not afford secure anchorage. One may give due weight to all these things and yet be utterly at sea when really critical or nicely shaded rate questions arise. The history of railway rates and rate-making has not yet been written. However, enough is known of this history to justify the statement that in the United States at least the whole question is still in confusion. I do not

wish to be understood as belittling the efforts of the many men who have been at work upon this problem during many years of the past. Many excellent ideas have been expressed and many practical rules of permanent value have been formulated. In fact, it is true that a proper synthesis of all that has gone before will afford us every possible rule for the present. What is needed is an agreement as to fundamentals.

Every one present is familiar with the history of railway legislation of the immediate past. Some of the best laws that have ever been enacted have been enacted during the last three years. Some of the very worst also fall into that same period. But at no time in the railway history of the United States has there existed more serious antagonism between the different interests than during the last few years. Generally speaking, and leaving out of consideration whatever there may have been of malice in isolated spots, this antagonism can be traced back to the lack of agreement regarding fundamental rights and duties. Add to this legislative situation the distress in the financial world with its feeling of mistrust and uncertainty, and there is presented to our view a situation which demands the best thought of the best thinkers. Never has there been greater need for the establishment of guide posts in railway matters, which shall be capable of being seen and understood by all men, than at the present time.

As stated before, laws and courts have decreed that the public is entitled to reasonable rates, and that the man who devotes his property to the public use is entitled to a reasonable return on that property. Good service and reasonable rates are the rule of fair play. The people should not be asked to pay more than is reasonable for the service performed, and the railway companies should

not be asked to conduct traffic at rates which will not enable them to pay fair dividends and maintain their property in the highest state of efficiency. A reasonable rate will permit all this being done. Therefore it is essential to know how to make a reasonable railway rate.

The Railroad Commission of Wisconsin has been obliged to answer this question many times. We have followed certain definite lines, beginning with the general proposition that every branch and class of traffic shall contribute its fair share to the revenues of the company, and, as a corollary to this, that the cost of transportation shall be duly weighted among the other features which determine the reasonableness of the rate, such as value, risk, space, etc. My colleague, Mr. Erickson, will describe briefly some of the methods which the Railroad Commission of Wisconsin has employed, and Mr. Smalley, of the faculty of the University of Michigan, will read another brief paper, after which we shall resort to a free floor for everybody. Each speaker will be limited to five minutes at one time. Because of the more general character of Dr. Smalley's paper, we listen to that first, before taking up the rather special and concrete discussion of Mr. Erickson.

THE BASIS OF REASONABLE RAILWAY RATES.

HARRISON STANDISH SMALLEY.

As the time assigned for this paper would not be sufficient for a presentation, even in outline, of the large subject with which it deals, it has seemed advisable to confine the discussion to a single aspect of the subject. There are many such aspects, of varying degrees of importance, but perhaps none is of such fundamental consequence as is that perplexing question which deals with the relation of private and public interests in rate-making. Indeed, the chief cause of disagreement among those who discuss railway rates is to be found in difference of view as to the proportionate influence of private rights and of the public welfare in the determination of tariffs. Admittedly this is a difficult question, but its solution is a condition precedent to successful rate control. At least we can never reach common ground in our discussions of reasonable railway rates until this subject has been thoroughly worked out and conclusions reached in which there can be general concurrence. It is the purpose of this paper, therefore, to suggest a few points bearing upon this matter, with the hope, not that final conclusions may be announced, but that discussion may be provoked.

At the outset we are confronted by the familiar proposition, so often announced by our courts as an established judicial doctrine, that rates must be just both to the railways and to the public. This statement bears upon its face such marks of fairness that it is widely accepted

as a sage maxim, and the courts have complacently re-iterated it, in apparent ignorance of the fact that what they demand is frequently impossible. The fault with the *dictum* is that it assumes what is not always true—that rates can be just both to the public and to the railways. Insofar as they can, well and good. But often the interests of the two clash, so that whatever rates are established must be unjust to one, or to the other, or to both. Either the public must sustain the burden of rates higher than those demanded by considerations of the general welfare, or else the railways must operate rates too low to afford a fair return upon invested capital, or both must share the burden. I believe that we should take a long step forward if we would abandon the idea of justice in rates, and would frankly recognize that under a system of private ownership and operation, rates must of necessity frequently work injustice, and that in all such cases the proper rate—indeed, the reasonable rate—is attained when the burden of injustice has been properly placed or distributed. The important question, then, is as to the proportionate burden of injustice which should rightfully be borne by the railways on the one hand and by the public on the other.

The answer to this question must depend on many considerations, but in no small measure it will be determined by the view which is entertained as to the purpose of public rate regulation. What is the object of rate control? Two widely differing conceptions are possible. On the one hand it may be thought of as a purely remedial function, designed to correct the evils apparent in railway administration, while on the other hand it may be regarded as a positive, constructive agency or force to be directed toward the great ends of social and industrial development. In the first of these aspects it may

be likened to *materia medica*, which cures diseases, while in the second it resembles hygiene and physical culture, which build up the body and improve its condition.

Of these two views doubtless the first has, up to date, exercised by far the more important influence upon public discussion and upon legislation. We have been so occupied in an attempt to cure industrial ills resulting from wrong rate-making, that we have had little opportunity to consider the efficacy of right rate-making not only to prevent those disorders, but to build up the health of the body economic as well. Nevertheless, there can be no doubt that, to a limited extent, that idea has been present in regulation by commissions. It is constantly reflected, for example, in the earlier reports of the Interstate Commerce Commission. That its extensive application would be somewhat dangerous in the immature and unsettled state of thought now prevailing, may be conceded; yet one cannot but wonder whether its importance will not grow as time passes by. The control of railway charges affords a remarkable opportunity for providing "the conditions of a healthy, vigorous and well-proportioned social and industrial life". In view of this fact, this query is natural: So long as the government is exercising this force, should it remain indifferent to its potentialities and fail to seize the opportunities for social progress which it affords? Is it not possible that when the more pressing questions concerning railways have been settled, this conception of the function of rate-making may determine the ultimate form of the railway problem?

But, however that may be, the fact remains that at the present time both conceptions are of practical significance, and also that the relative importance of the two may very likely change with time. Now, this has an important bearing on the question of public and private

interests. For, however desirable it may be that when rate-making is purely remedial in character the public interest should prevail to the farthest possible extent, it is much more desirable when rates are made for purposes of social development. In fact, it is absolutely necessary that then the private interest shall yield, for such a purpose can be accomplished only by an extremely careful and often delicate adjustment of numerous rates, affecting various carriers, various commodities and various localities. To disturb one or two or three rates would destroy the balance and impair, if not ruin, the whole scheme of regulation. If one railway, then, could have certain rates set aside as impairing its private rights, such rate regulation would be impossible. Hence, in proportion as the constructive theory displaces the remedial, or grows in relative importance to it, the demand that the public interests shall prevail becomes more imperative and the proportionate burden of injustice to be placed upon the railways is rightly increased.

But the distribution of this burden will depend not only upon the acknowledged purpose of rate control; it will also be influenced by our views as to the character of the railway business. It is a well-known fact that, at least in the eyes of the law, the railway business is essentially public in character. Our courts have repeatedly asserted this to be true, and the people at large have caught up the saying and echoed it with facile glibness. The railway is a public utility, the railway company a public servant, the railway business a public business. But what makes it a public business? Numerous answers have been given to this question, but none is thoroughly satisfactory. No explanation of the publicness of the railway industry has been offered which would not, if carried to its logical conclusion, throw almost all forms of business into the

public class. Indeed, many lay minds are tempted to doubt whether a clean-cut classification of industries into those which are public and those which are private is possible, and while the courts have insisted that it is, they have never announced the basis of classification in clear and satisfactory terms. A task, therefore, to which thought may advantageously be directed, is that of determining whether there are essential qualities in the railway industry which indubitably make for publicness. For, unless such qualities can be discovered, it would be a grave mistake to approach the problem of reasonable rates with the bias that must necessarily accompany the conviction that the business to be regulated is in nature public.

But, granted that such qualities can be found, their discovery simply presents a new problem: To what extent should the fact that the business is public influence the determination of its charges? Should public interests prevail over private at all costs, or should merely limited weight be accorded them, and if the latter, just where should the line be drawn? Upon this point conflicting views are even now held. Some go so far as to say, with Mr. Justice Brewer, that when one embarks in a public business, "he voluntarily accepts all the conditions of public service which attach to like service performed by the state itself", and that, therefore, "if the body which expresses the judgment of the state believes that the particular services should be rendered without profit, he is not at liberty to complain". (*Cotting v. Kansas City Stock Yards Co.*, 183 U. S. 79, 93.) But while this view is held by some, others insist that it unduly curtails private rights, and that the publicness of a business does not justify such extreme regulation by the public. Discussion of this question, however, is bound to be

fruitless until we see clearly just what it is that makes the business public. We must know what the elements of publicness *are* before we can decide whether they are of such a character as to justify Justice Brewer's view, or any other opinion, either more conservative or more extreme. This, then, is a question of primary importance.

Another element that may enter into the determination of the balance between public and private rights is the extent of the railway's liability for loss or injury to property transported by it. Present rates are quoted not with reference to the company's common law liability, but rather to the limited liability expressed in bills of lading. The revised Interstate Commerce Act attempts to establish uniformity in this regard, so far as interstate rates are concerned, by providing that the initial carrier shall be liable for any loss, damage or injury caused by it or by any other carrier, and that no contract, receipt, rule or regulation shall exempt the carrier from that liability. Of course, this provision must run the gauntlet of the courts, and it is quite possible that it will be declared unconstitutional. If sustained, the judicial interpretation of the vague and uncertain term "caused" will be interesting and important. Whether it will restore the now obsolete common law liability, or will establish a responsibility much more curtailed, the interpretation will have its bearing in the determination of reasonable rates.

There is another matter which it seems proper to suggest for discussion, especially in view of the fact that it is at the present moment a live question. When the reasonableness of rates fixed by public authority is made the subject of judicial review, it is the established practice of the federal courts to issue temporary injunctions suspending the rates during the proceedings not only in the

trial court, but in the appellate courts as well. The propriety of this practice has never been seriously argued before the Supreme Court, but the point has arisen incidentally in a number of cases and the practice has invariably been approved by that tribunal. Nevertheless, the question can hardly be regarded as settled, for it has never been squarely presented to the Court as a leading issue in a case. This, however, may soon occur, in the cases which have arisen because of the refusal of certain state officers to obey temporary injunctions leveled against state laws for the regulation of rates. When these cases are decided, it is to be hoped that the Supreme Court, on full consideration, will condemn the practice. For there are many, among whom the writer is one, who believe that it does not recognize the proper balance between the corporate and the public welfare. It is pursued, of course, in defense of private rights, for it is recognized that if the railways are compelled to operate rates ultimately declared to be unreasonably low, they suffer irreparable injury. But the courts apparently forget that if the roads are excused from operating rates which prove to be reasonable, the public suffers irreparable injury. It certainly seems unfair to the public that a scheme of regulation should be rendered ineffectual by being set aside for a term of years when there is no certainty that it is unconstitutional. This is especially true in view of the fundamental doctrine of constitutional law that legislation is to be presumed valid until its repugnance to the constitution is proved beyond a reasonable doubt; and if there is any case in which the desirability of observing that doctrine would seem to be beyond question, it is one in which the legislation affects such important public interests as are involved in rate regulation.

All that has been said in reference to public and private interests suggests a general comment on the action of the courts in setting aside rates made by a commission. Such action is commonly interpreted as a criticism of the commission. Many persons seem to regard it as conclusive proof that the commission was wrong, and that its rates were unreasonable; and they sometimes draw the further conclusion that commissions are untrustworthy and even dangerous things. As a matter of fact, generally speaking, no such conclusion is justified. The failure of a commission to win its cases may not mean that it is wrong; on the contrary, it may mean that the courts are wrong, in that they are not willing to concede enough to the public interests. Both commission and courts have the same problem,—to balance public and private rights,—and is there any certainty that the courts have solved it more successfully than the commission? Is it not, on the other hand, quite likely that the commission has been more successful, not only because it has made a special study of the whole rate problem,—which comes only occasionally to the attention of the courts,—but also, and chiefly, because the courts are confessedly biased on this particular matter? For, whatever general dicta the courts may have uttered in reference to the rights of the public, as a matter of fact they make the corporate interest the controlling consideration in every case, asserting, in the language of Mr. Justice Brewer, that “the primary duty of the courts is the protection of the rights of persons and property”. When the courts not only admit, but even boast, that this is their primary duty, they can hardly be regarded as qualified to settle the issues that arise between public and private interests. Hence a court decision adverse to a commission’s rates should be presumed to mean, not that the commission

has gone wrong, but rather that a proper recognition of the public interest is impossible under our Constitution as at present interpreted by the courts; and that either the Constitution or its interpretation must be changed or our system of private railroad enterprise must fail. Some individualists welcome such court decisions as a vindication of private rights. Rather should they deplore them as proclaiming the failure of individualism in the railroad industry.

These considerations lead to one final suggestion. If, in the course of time, general agreement is reached as to the principles governing the relation of the public and the railroads in rate-making, it would be well if those principles could be put in form and adopted as amendments to the federal Constitution. Of course, there is little chance that this will ever be done, for the difficulty of amending the Constitution is great, but unless it is done we may be sure that public control can never wholly succeed in maintaining reasonable rates. For, unless the proper principles are expressed in the Constitution, the courts will not be bound by them, but can continue their present policy of judging rates from the standpoint of private rights. In fact, it is certain that no principles developed from any other standpoint will ever be recognized by the courts, except under compulsion. For, while our courts have shown themselves to be zealous defenders of private rights, they have manifested but slight disposition to protect public interests.

THE BASIS OF REASONABLE RAILWAY RATES.

HALFORD ERICKSON.

The questions whether it is possible to determine the cost per unit of transportation to the carrier, and whether this cost, if it could be determined, is of any particular value in fixing reasonable rates, have often been discussed. The conclusions most frequently arrived at in these discussions seem to be that the cost of transportation, say, one hundred pounds of freight for any given distance, cannot be computed and that, even if it could be, it would not be of a great deal of assistance in making freight rates. These conclusions, however, do not seem to be entirely convincing. While it may be impossible to find the exact cost of each particular shipment, it appears to be possible to determine this cost per unit closely enough for most practical purposes. Likewise, it also appears that the cost is, perhaps, the most important element that should be taken into consideration in fixing rates. In order to show these facts it will be necessary to describe briefly some of the methods under which, in our work on the Wisconsin Commission, we have found it possible to compute the approximate cost per unit of transportation, and also to touch upon certain other matters to illustrate the importance of this cost to the rate-maker.

The first step in computing the cost consists in separating the expenses between the different branches of the service. The freight traffic, for instance, should bear its fair share of the total cost and this is true also for the

passenger traffic. A large proportion of the expense items can be actually separated, but there are also many items that are common to all branches of the traffic and that have to be assigned upon bases that are more or less arbitrary in their character. The fact that they may be arbitrary, however, does not necessarily mean that they are merely estimates or that they may not be fair. It is usually found that most of the common items bear a close relation to some particular unit of operation or traffic. Some depend on either the car, the locomotive, or the train mile. Others again depend on the number of cars handled, the number of tons, and the number of tons carried one mile. There are also common or indirect items which bear a very close relation to some of the direct expenses and can safely be allotted in the same proportion. When the various expense items are taken to pieces, reclassified, and in various ways put through the laboratory process, it is usually found that they can be allocated and placed about where they naturally belong. It is upon processes of this character that nearly all systems of cost accounting are based. There are to-day many industrial and commercial enterprises with more branches of production and with a larger proportion of common expense items than common carriers, where cost keeping has been so highly developed as to furnish the bases upon which the prices of their products are fixed. The difficulties that have had to be overcome in many of these cases were even more complicated than those which obtain in the railroad service. What has been accomplished in these industries may also be accomplished for common carriers. If these carriers would go to the trouble of keeping exact records, their common expense items would be materially reduced. It is true that this might involve more detailed records than many now in

use, and that it might also tend to increase the operating expenses. But the value of this work to the rate maker, particularly to Commissions, would be extremely great. The field certainly offers enough promises of usefulness, so that it ought at least not to be left unoccupied simply because it happens to involve some trouble and perhaps some additional expense.

When the total expense of the freight traffic has thus been determined, the next step consists in separating the same on the basis on which the traffic is handled, or between the cost of handling it at the terminals and the cost of moving it between these terminals. In this case, as in the case of assigning the expenses among the different branches of the traffic, many items are encountered which are common to both sides and which do not readily admit of exact distribution. But even these difficulties may be overcome. Upon a close and detailed examination of the nature of the various items, it will be found that in this case also the common expenses may be fairly and equitably distributed.

With these separations made, the problem is how to compute the cost per gross and net ton, the cwt., or other unit. This can be done best through the medium of the loaded car. This must necessarily be so since freight is ordinarily handled and moved in carload lots, some of which weigh a great deal more than others. When the terminal expenses are pro-rated upon the number of loaded cars, we obtain the average cost of these expenses to each loaded car. When the cost per car, in turn, is pro-rated upon the gross weight, or on the weight of both car and the load, we obtain the cost per gross ton. The figures thus obtained furnish a basis upon which the cost per unit of the terminal expenses may be determined for light as well as for heavy loads. When the movement ex-

penses per loaded car per mile are pro-rated upon the total weight of both the car and the load, we obtain the cost per gross ton per mile of haul. These figures in turn constitute the basis upon which the net cost per unit per mile for moving the freight between stations under all sorts of loading may be determined.

Under these methods it is thus possible to find the cost per unit for handling the freight at the terminals, as well as for each mile of the haul. These two items make up the cost of transportation. The former, or the terminal cost, is a constant quantity. It is not affected by the distance, but remains the same for short as for long hauls. The movement expenses, on the other hand, vary with the length of the haul. They are also relatively greater for way-freight or local traffic than for through traffic.

The final steps consist in adjusting the movement expenses between the way freight and the through haul. As has been said, the former is, as a rule, the more costly. Way freight trains stop and unload and take on freight at practically every station on their run, and therefore make much less mileage in the same time than through trains. In fact the latter usually make more than twice as much mileage in a given time as the former. Slower time in this case stands for relatively higher costs for wages, fuel, and other items. While these excesses in the cost for some of the items are to some extent offset by lower cost for certain other items, those offset are not great enough to place the two classes of hauls on an equal basis. In addition to this the through trains often carry heavier loads, which also tends to reduce the relative cost. Investigation has revealed that the movement expenses per unit are often from two to three times as great for way-freight as for through-freight.

The methods which have thus been pointed out are often very complicated. In fact they are mostly of such character as to require almost all sorts of laborious calculations. For purposes of illustration, the cost per unit for one of the leading roads in this state, as obtained under these methods, has been tabulated, and this table may be examined. It conveys a fairly good idea of what has been said. The figures contained in it constitute some of the more important material for the construction of a rate schedule.

The charges which a railroad may make for the services it performs are limited by its obligations to the public and by the principles which govern its business. It is generally held that it has the right to adopt a schedule of rates that will produce sufficient revenue to meet its operating expenses, including a fair return upon the value of its property. A schedule which will meet these requirements is regarded as reasonable when considered as a whole. The lowest rate would perhaps be that, which, besides meeting the operating cost, would contribute at least something towards the interest upon the investment. The highest rate in it, on the other hand, may be several times as great as the lowest rate. Much, in this respect, depends upon the policy of the roads or of those who fix the rates.

In determining what is a reasonable rate, therefore, it is also necessary to know the value of the property used for the purposes of transportation as well as what constitutes a fair rate of interest upon this valuation. These are important questions and have frequently been passed upon by the courts. While no definite rules have been laid down for fixing either the valuation or the rate, the courts have pointed out the various factors which should be taken into account in determining both.

But a rate schedule to be fair and just should not only yield the required amount in revenue, but each particular rate in it should bear a proper relation to all the other rates. That is, the charge on each article or shipment should cover the cost of transportation and contribute its just proportion of the interest on the investment. This proportion in turn depends upon the cost of transportation and on the value of the service or of the articles shipped.

The value of the service, in the sense it is used here, is the same as the value of the articles shipped, and is another element that should be taken into account in adjusting rates. Articles of high value can afford to pay higher rates than articles of low value. In other words, value is a measure of the ability to pay. Cheap and bulky articles can be obtained for transportation only at low rates. They have not the ability to pay high charges. This is particularly true when the distance is great. For articles of high value in proportion to bulk the situation is different. In this case the rates, even if high as compared to those for low priced goods, constitute so small a part of the total value as to be of comparatively small importance. Since high priced goods can afford to pay more than low priced goods it is to the best interests of both the public and the carriers that their rates should be higher. Low grade and bulky articles should perhaps be charged rates that are sufficient to meet operating expenses and yield something above this for interest on the investment. Such traffic is of importance even on these terms. It increases the volume of the business and therefore decreases the cost per unit. By contributing something towards the profits of the carrier it also reduces the amount that will have to be so contributed by the other classes of the traffic. Arti-

cles of medium value and bulk should be charged the average rates. Articles of high value and small bulk should be charged rates that are high enough to meet operating costs, including interest on the valuation, and which besides will make up for any deficiencies in capital requirements that may have arisen because of the low rates at which the low grade traffic had to be accepted.

Except for the commodity tariffs, which come in a class by themselves, the consideration that is given to value in fixing rates is usually determined by the freight classification. Articles of high value are ordinarily placed in classes which take higher rates than articles of lower value. This is the general rule, although there may be some exceptions to it in cases where other factors such as risk, weight, bulk, etc., play an important part. Classification is in fact largely based upon the value of the articles which are included in it. It is a part of the rate schedules. The principles which govern in classifying the goods are the same as those which control the making of rates.

It is in passing upon facts of this character that the cost per unit of transportation becomes an important matter. This cost is of material assistance in determining the general rate level of the schedule as a whole, or the amount to be earned under it. It is also necessary in order to determine what is a fair rate for each class of articles. In fact it is difficult to see how either an entire schedule or any particular rate can be fair which has been fixed without any reference to the cost of the services involved. This cost is also of the greatest importance in the classification of the freight, for as computed here it discloses the effect of both weight and bulk upon the cost of the services. For articles of great bulk in proportion to their weight the cost of loading

per car is usually light and of transportation relatively high. For articles of small bulk in proportion to the weight the reverse is true. Another fact which tends to increase the value of such cost figures is that the various factors of transportation remain fairly constant from one year to another. The cost per unit, for instance, for the various roads which enter this state has remained about the same for the past five years. The situation is also in most cases such that due consideration can be given to the cost without excluding any of the other elements that should be taken into account. In view of all this it would seem that cost easily occupies the first place among all the factors which must be considered in rate making. The cost per unit of transportation modified by the value of the articles transported or their ability to pay charges constitutes the basis upon which most of the rates may safely be based. For purposes of further illustration a tariff schedule has been made up in which both the cost and the value of the services has been taken into account, and which under present conditions will yield about ten per cent. as interest on the cost of reproducing the road to which it applies.

The discussion which followed was very informal. The chief points brought out were as follows: (1) There is no such great difference in the cost of transportation on different roads as one might expect. This refers to roads in Wisconsin. (2) Cost varies in different years, yet these variations have not been great during the past fifteen years. (3) Rate-making on a basis of cost requires that the state commission should separate intrastate from interstate traffic, and while to some extent arbitrary, this can be done closely enough for practical

purposes. Traffic in Wisconsin costs less than the traffic on the whole lines of roads doing business in Wisconsin.

(4) Intra-state and interstate is a distinction different from "local and through traffic". (5) Terminal expenses do not cause particular difficulty. They are distributed over the traffic which benefits by the use of the terminal.

(6) The commission has not omitted to consider empty car mileage in its determination of cost. This is especially prominent in the live-stock traffic. (7) Rate-making on a basis of cost permits of increases as well as decreases in rates due to changes in wages and cost of materials. (8) The commission has not made cost an invariable basis. This has been used as a guide, while the departures up or down in the case of any commodity may be made on considerations of value of the commodity or other tests of expediency. While this procedure admits the failure of cost as a sole and invariable basis in every charge, it is vastly different from making rates on consideration of expediency alone without reference to cost. With cost as a basis you have a norm to be departed from in cases where this may be clearly justified, in individual cases, but your rates as a system will still be based on cost. (9) This system of rate-making requires that distance be not ignored as a factor, but group rates and tapering rates have been used.

Professor Meyer explained a number of statistical charts prepared by the commission for its own use showing the systematic arrangement of rates after the commission had adjusted them.

MONEY AND BANKING.

ROUND TABLE DISCUSSION: D. R. DEWEY, *Chairman.*

D. R. DEWEY: The plan before us for consideration to-day is that proposed by the Currency Commission of the American Bankers' Association. In brief, its salient point is the issue of additional credit notes equal to 25 per cent. of the capital up to 40 per cent. of the bond-secured circulation, subject to a tax of $2\frac{1}{2}$ per cent. per annum. Provision is also made for the issue of additional notes subject to a higher tax of 5 per cent.

Although it is desirable that discussion as far as possible should be concentrated upon this particular plan, it must be remembered that Congress is not confined to the acceptance of this, or of that of no legislation at all. There are other plans as well as that of the American Bankers' Association; and, if one is persuaded that some currency legislation is necessary, judgment as to this particular plan must involve a comparison with others. Among these other plans may be mentioned (1) that of a central bank of issue,—a bank of banks, (2) an extension of bond-secured circulation so as to admit railroad, state, and municipal bonds as a basis of security, and provide for the emission of short-term notes based upon such securities; and (3) provision for bank-note issues upon bank-book credits, regardless of a security by national or other bonds held in pledge by the government. In the list thus specifically enumerated I have omitted the so-called asset currency plan of the Chamber of Commerce, and Ex-Secretary Shaw's plan for an emergency

currency, because it seems to me at bottom they involve the same principle as that of the Bankers' Commission. While there are differences as to the percentage of issue of credit notes, and rates of taxation to be imposed while in circulation, they are alike in tying up the new circulation to government bonds.

We have then to consider the respective merits of an extension of circulation based upon government bonds; of a circulation based upon government and other bonds; of a circulation based on general bank credits; and finally of a circulation which may be put forth by a central bank, as supplementary to the circulation which individual banks now carry.

The plan of the American Bankers' Association is frequently spoken of as a plan for asset currency. It will be observed, however, that it is simply a proposition for the issue of notes equal to 125 per cent. upon bonds, 100 per cent. of which shall be, as at present, taxed $\frac{1}{2}$ of 1 per cent., and 25 per cent. shall be taxed at $2\frac{1}{2}$ per cent. The ostensible object of this plan is to provide a certain portion of currency which will adjust itself to the periodic movements of the money market, and which will presumably flow and ebb according to the demands for the movement of crops and for special emergencies. Advocates of this plan, so far as I am aware, do not emphasize the need of a permanent addition to the total supply of bank-note money. They are, however, desirous of introducing some element of elasticity. The question therefore before us is, will a currency issued in this way, which is based primarily upon the amount of bond-note circulation, and consequently upon the amount of bonds available for notes, create this elasticity?

It is estimated that this plan would provide, on the basis of present circulation, a possible increase of a little

over 200 millions of credit notes. In this connection it is to be noted that, during the past ten years, there has been an increase of bank-note circulation of 400 millions. If the bonded indebtedness of this country should increase so as to make a larger amount of bonds available for bank-note circulation, then there would be a possibility of still further increase in the credit-note circulation; the two, credit-note and bank-note circulation, would go hand in hand.

Elasticity apparently is to be secured by two forces: First, a tax of $2\frac{1}{2}$ per cent., and second, an extension and improvement in redemption facilities. If, however, there is to be a system of real and effective redemption, why a tax of $2\frac{1}{2}$ per cent.? If, however, there is not to be automatic redemption, as works out, for example, in the Canadian system, is a tax of $2\frac{1}{2}$ per cent. sufficient to force retirement? Is there not the possibility, therefore, that the credit-note in times of industrial prosperity may stay out continuously? and may not the financial demand for this credit currency be as urgent as the commercial crop-moving demand?

Elasticity of circulation presupposes effective agencies for retirement and redemption of notes. Does the plan of the American Bankers' Commission provide any way by which these credit notes will inevitably flow back? The report says that "the Comptroller of the Currency shall designate numerous redemption cities conveniently located in the various parts of the country. Through the agency of the banks in such cities, adequate facilities shall be provided for active daily redemption of the credit notes." But will the establishment of "adequate facilities" necessarily result in the retirement of such notes? We have in this country 6000 individual national banks, each independent of the others. Our banks have not

been trained in redemption and there is not that rivalry between a few competing bank systems, such as obtains in Canada, which would lead banks to present for redemption the notes of other banks. Can this redemption be obtained except by the passage of a law forbidding any bank to pay out the credit notes of any other bank? and does not effective redemption involve the machinery of either a central bank or of systems of branch banks? It must also be remembered that bank notes are regarded by the people at large as absolutely sound, as good as government legal tender, and that consequently they stay out in the hands of the people for a considerable period of time. We must also remember that the Treasury department has, for governmental ends, actively opposed the retirement of bank-notes and practically held out special privileges to banks which would run counter to commercial forces. If elasticity can be secured in as simple a way as that implied in the Bankers' plan, why would it not be possible to improve the present methods of redemption so that there would be an ebb and flow?

The plan of the American Bankers' Commission is confessedly a compromise. It is believed by many, however, to be a step toward asset banking. If the bond circulation should decrease, the plan provides that the authorized issue of credit notes shall be increased to a correspondingly greater percentage of its bond-secured notes. We must therefore face this contingency and pass judgment upon the wisdom of indirectly introducing the banking principle into our monetary circulation. If this principle is to be adopted, we should do it with our eyes wide open and judge of the present proposal by its possible consequences. If, however, our national indebtedness increases, so that our bank-note circulation is still

harnessed to government bonds, will any real advance be made toward an elastic credit currency?

Again it may be asked whether it is desirable to adopt any new currency plan before certain reforms in our banking system have been put in operation. Some of these seem so obvious and pertinent to the ends which the Bankers' Commission desires that they fall within the scope of a discussion on the currency. Among these defects may be mentioned the question of :

1. Insufficient reserve, particularly of country banks and the centralizing of such reserves in New York City. The Clearing House banks of that city have repeatedly called attention to the evil practice of paying interest on deposits of bank balances.

2. The inadequacy of redemption facilities. May we not establish a satisfactory system for redemption of present bank-note circulation before we attempt to introduce further circulation?

3. The over-investment of banks in stocks and securities which cannot be rapidly liquidated, thus tying up the funds of the bank for too long a period.

4. The bad banking methods of trust companies.

5. The speculative character of the call loan market in New York City.

6. The absence of any system whereby negotiable paper can be easily rediscounted so that loanable funds will flow to the place where they are most needed for commercial purposes.

7. And, finally, the rigidity of national bank reserves. Might it not be possible to permit our national banks, in accordance with a suggestion of Mr. Schiff, to encroach upon their reserves, say up to one-fifth of such reserves, by payment of a tax of 6 per cent.? This would let loose about \$125,000,000 which might be as service-

able for emergency circulation as the credit notes of the American Bankers' plan.

The foregoing suggestions are made in a spirit of inquiry rather than that of captious criticism. It is easy to criticise any currency plan, but it is also easy, when we are overwhelmed by a mass of conflicting details, to be diverted from fundamental principles. Whether we are agreed or not in our measure of belief in the quantitative theory of money, it seems to me that we must all be impressed by the profound changes which must be effected by the enormous new supplies of gold. We have also been living in a period of unprecedented industrial prosperity, which has strained, and was bound to strain, to the utmost, the adjustment of the supply of capital to its demand. There should therefore be a sober consideration as to whether this is a time to make a legislative change in our currency system, without at least an exhaustive preliminary investigation of the real changes which are taking place, the objects which are desired, and whether the agencies proposed are likely to accomplish such ends.

WILLIAM A. SCOTT: In considering the plan of the American Bankers' Association, I have been guided by two principles which I believe to be sound. The first is that, for the elastic element of a currency system, in addition to deposits subject to check, bank notes issued against commercial assets under such conditions that the quantity in circulation will expand and contract automatically with those assets, approximates the ideal closer than any other form of currency. The second is that the issue of such a currency should be concentrated in as few hands as possible. The first of these principles seems to me to result from the very nature of commerce and of

the banking business. The two are related in such a way that the demand for currency registers itself at banking institutions in the form of the presentation for discount and the liquidation of commercial paper (this term being used in its broadest sense). If, therefore, such presentation and liquidation automatically brings into and takes out of circulation the currency demanded, the need for elasticity is met in an ideal manner. The second principle seems to me to be established by experience. The tendency in all European countries and Canada, where alone any great amount of experience with this sort of currency has accumulated, has been in the direction of the concentration rather than the diffusion of issues. In most European countries a single bank of issue is clearly preferred, and in Scotland, Ireland, and Canada the number of such banks is small. In none of these countries is there apparent any disposition to increase the number of issuing banks. The tendency is clearly and decidedly in the other direction.

Those features of the plan of the American Bankers' Association which aim at giving this country a bank-note system based on commercial assets appeal to me very strongly, but I cannot favor that one which allows all the national banks of the country, and such others as may be established, to issue such currency. I think I appreciate the practical considerations which led the commission to incorporate this feature in their plan, but, personally, I would prefer to defer still longer the currency reform which the country so much needs to the taking of a step so clearly in the wrong direction as this one seems to me to be.

My objection to this feature of the plan is not only the principle I have laid down, because I am willing to admit that in this matter European experience may not

be the last word for us, but my belief that country banks do not need the privilege of note issue in order to satisfy completely all the legitimate demands of their communities. The reports of the Comptroller of the Currency make this very clear. They show that practically at all times, during the crop-moving seasons as well as at other periods of the year, and even when the money markets at the great centers are stringent, they carry respectable surplus balances with their correspondents in the reserve cities. During the last two years in the state of Massachusetts these balances have never been reported to be less than 23 per cent. of the total kept with reserve agents (that is, 23 per cent. more than they were permitted to count as part of their legal reserves), and in the report for September 4, 1906, they were as high as 45 per cent.; in Iowa during the same period they were never less than 50 per cent. of the total, and in the June and September, 1906, reports, they were 59 per cent. of the total. These two states are fairly representative of the others. These figures seem to me to indicate that the loan funds normally placed at the disposition of country bankers are considerably in excess of the need for loans in their localities, and that, in consequence, these banks are bound to have abundant reserves on deposit with their reserve agents to meet the demands made upon them. This view is also confirmed by the observation, which I think most students of economic conditions in the United States have made, that our country districts are rapidly growing wealthy, that is, that they are saving a goodly share of their income and are investing these savings in the great enterprises of the country as well as in purely local concerns. With a banking system like ours, this necessarily results in the conditions revealed by the figures of the Comptroller of the Currency. If we had a branch bank

system, these conditions would be revealed in the accounts representing the relation between the country branches and the central institutions.

So long as the banks in reserve cities are able to respond readily and completely to the drafts of their country correspondents, the latter will be able to supply the wants of their customers. But right here the rub comes. To meet the demands of country correspondents depletes the reserves of the banks in the reserve cities, frequently reducing them below the limit prescribed by law. During the last two years in each report of the Comptroller of the Currency the reserves of a number of these cities have been below 25 per cent. The figures are as follows: In the report of January 29, 1906, seventeen cities were under the mark; in that of April 6, 1906, twenty-one; in that of June 18, 1906, seventeen; in that of September 4, 1906, twenty-four; in that of November 12, 1906, twenty-one; in that of January 26, 1907, twenty; in that of May 20, 1907, nineteen, and in that of August 22, 1907, nineteen. The problem before the country is clearly revealed by these facts. It is the reserve cities that need the aid of an elastic system of note issues. If they could supply the needs of their country correspondents in whole or in part by means of such notes, or even if they could in this way supply the wants of their local customers, they could hold on to their legal tender money and even draw into their reserves a portion of that in general circulation. The necessity for an undue contraction of their loans would thus be prevented.

I regret that the committee of the Bankers' Association did not concentrate its attention on this problem. I know that its members felt that any scheme that did not treat all the national banks alike would fail to command the support of Congress or of the country banks, but I won-

der if the experiences through which we have just passed and are still passing may not have changed the views of many congressmen and bankers regarding this matter. The recent large increase in the number of persons who have expressed their belief that a national bank with a monopoly of the right of note issues is the correct solution of this question would seem to indicate that this is the case. In any event, would it not be better to work out a thoroughly practical plan along right lines and then push it hard and continuously until Congress yields than to give support to a plan which may prejudice rather than advance correct measures in the future?

ISAAC A. LOOS: I should like to ask Professor Scott whether it would not be more correct to describe the refusal of solvent banks to pay checks in currency during the recent stringency as extra legal rather than illegal? Of course, the banks themselves knew that they had no warrant in law for that practice. And again, is it not overstating the case to argue that clearing house loan certificates could not be developed into an emergency currency because these instruments have hitherto been used only as an exchange medium between banks? Is it not true that during the recent panic, in many of the towns of the Middle West, clearing house loan certificates were issued in round numbers in comparatively small denominations and used as exchange media in the ordinary retail trade just as cashier's checks were so used? I know this was actually done, for example, in a number of Iowa towns.

FRANK L. McVEY: Various persons, in addition to one of the speakers of the afternoon, have emphasized the central bank as the essential thing necessary to solve

the banking problem in the United States. The argument for this position has been drawn from European experience, overlooking the fundamental differences in extent of territory and financial habits of the people. The development of banking in this country has been along local rather than the centralized lines as seen in Europe. Here the citizen has gone into banking voluntarily, forcing in time the state to regulate his business, while abroad the state, by the absence of systematic banking, established a central bank to meet the needs both of the government and the people. Another difference is to be noted in the matter of deposits. The people of Europe have never been depositors to the degree that they have in America, and the emphasis, in consequence, has been placed upon the central organization that could supply the demand for notes. With us each community has provided its own bank, developed deposits, and carried on its business in an increasing measure by checks and drafts, giving but secondary consideration to the question of notes.

It is argued that the difficulties which have beset us in the recent financial panics are directly traceable to the absence of a satisfactory note issue system, and the lack of a central bank in which reserves could be deposited and a special reserve system created to meet the bankers' demand for cash. While recognizing the weakness of our note issue system and the breakdown of the reserve scheme, the fact of the matter is that the trouble lies a great deal deeper than is evidenced by the demand for a central bank.

The banking capital of the United States has been and is inadequate for the amount of business now done upon it. No other business attempts to do as large a percentage of business upon its capital as the majority of the

banks have been doing in the last ten years. A bank's capital is invested in money and quick assets easily convertible into money. To tie these assets up in industrials and collateral which is not readily convertible is to threaten the stability of the bank. For nearly a decade the percentage of capital to volume of business has steadily declined. Since then the amount of business has increased by leaps and bounds. The result which has followed was inevitable, and one not likely to be materially bettered by the adoption of a central bank.

The simple device of prohibiting the deposit of reserves at interest with reserve city banks would keep the reserves at home and materially better the depositor's chance of getting his money, as well as protect the community from the variances in the fortunes of city banks.

Whatever may be said of a central bank from a banker's point of view, it is a political impossibility in America. The fear of centralized control over credit and note issue are so abiding that the party which champions such a measure is pretty sure to go down to defeat; but, moreover, the organization of such an institution, with the 15,000 banks, state and national, would hardly meet the problem in a state so extensive in territory and so vast in commercial enterprise. The organization of clearing house associations as legal institutions and as a recognized part of the banking system, with powers to issue notes in conformity with general regulations, would meet the conditions of the problem, while the prohibition upon local banks to deposit any part of their 15 per cent. reserve with reserve city banks would materially reduce many of the difficulties now associated with the piling up of reserves in New York City. Such a provision would effect some of the speculative business now financed

by city banks, but would undoubtedly give a firmer tone to the whole banking business in America.

It is not to be understood by these remarks that I regard innovation as unnecessary, but I do not have any confidence in the creation of a central bank to affect materially the situation so long as we have a bond-secured note issue and the piling up of reserves in central cities.

AGREEMENTS IN POLITICAL ECONOMY.

ROUND TABLE DISCUSSION: C. B. FILLEBROWN,
Chairman.

C. B. FILLEBROWN: I feel highly honored in having been called to the chairmanship of a Round Table of the American Economic Association for the discussion of Agreements in Political Economy, a topic that has long appealed to me as of the very greatest interest and importance.

I have been engaged for several years in a sort of probationary work, known to many, perhaps to most of you—that of trying to elicit from economists agreement upon certain definitions and statements of principles touching land value and land taxation.

Perhaps the best illustration I can give of the plan I have in mind is a statement of the present fruits of this effort, imperfectly indicated by the following recorded canvass of opinions:

		Yes.	No.
1902.	1. <i>Definition:</i> Ground rent is what land is worth for use	135	0
1902.	2. <i>Definition:</i> Public franchises are exclusive free privileges granted to one or several persons incorporated, and from which the mass of citizens are excluded. These franchises usually pertain to land, including, as they do (to use the language of the New York Legislative Ford Bill), all "rights, authority or permission to construct, maintain or operate, in, under, above, upon or through, any streets, highways, or public places, any mains, pipes, tanks, conduits, or wires, with		

	their appurtenances, for conducting water, steam, heat, light, power, gas, oil, or other substance, or electricity for telegraphic, telephonic or other purposes". Hence their classification, by the above act, as "land values" may be confirmed as correct, and their annual values properly classed as ground rent	103	25
1902.	3. A tax upon ground rent is a direct tax and cannot be shifted.....	108	26
1902.	4. The selling value of land is, under present conditions in most American states, reduced by the capitalized tax that is laid upon it....	105	17
1902.	5. Hence the selling value of land is, to the same extent, an untaxed value, so far as any purchaser, subsequent to the imposition of the tax, is concerned.....	95	24
1904.	6. <i>Definition:</i> Monopoly: Control, absolute or substantial, temporary or permanent, of the supply and hence of the price of any commodity or service, whether maintained (1) through control of natural resources, (2) through some special and exclusive right or privilege conferred by law, (3) through combination or concert of action, or (4) by any means which are not available to similar capital and skill in competitive hands.....	86	3
1904.	7. It would be sound public policy to make the future increase in ground rent a subject of special taxation	77	10
1906.	8. The selling value of land is an untaxed value. (Illustration No. 19).....	59	2
	Returns are now coming in upon two propositions lately submitted:		
	1. Ground rent is a social product.		
	2. A tax upon rent cannot be shifted.		

The concrete suggestion I would here offer is that, with the work already done for a nucleus, the same method be extended, corrected, improved, and adapted to include, as experience may justify, other and, finally, perhaps all points of economic theory, and the practical economic rules and principles to be deduced from them.

I would emphasize the great importance of such a step as a means to securing agreement on economic principles, and not as a method of advancing any practical program of reform.

Let it be supposed, for instance, that the Association itself should see fit to adopt a resolution somewhat as follows :

WHEREAS, This Association, recognizing the value of substantial agreement upon the largest possible number of definitions of common terms and of economic principles, commends effort toward the establishment and general enlargement of such agreement, and favors response and coöperation from the members of the Association, therefore

Resolved, That the President is authorized to appoint a general committee of not more than twelve members, upon whose recommendation definitions and statements of principles may be submitted to the full membership of the Association for approval and criticism; the progress of such agreement to constitute an available subject of annual discussion and report in the proceedings of the Association, and be it further resolved that this general committee may appoint or confirm working committees in various departments to conduct the necessary correspondence and report partial or preliminary agreements to the general committee.

An incident of such a concerted movement, as above outlined, might be an enthusiasm equal to or exceeding that of the recent Columbus Conference on Taxation, an interest that promises to be permanent and increasing. Work of this nature, which must of course be a growth, might afford pleasure as well as profit, and might readily enlist the interest of those who would make of themselves centres of agitation and development in the various fields of Capital, Labor, Rent, Wages, Interest, Taxation, Population, Production, Distribution, etc. If such a race is

worth the running, what more appropriate than that the American Economic Association should set the pace?

It is not expected that agreements like these will be new discoveries, but simply old discoveries brought into stronger light, formulated and subjected to continuous correction and perfection, through reconciliation of differences, and re-statement of old agreements to conform to the latest thought.

Such an assembly and exposition of essential principles can but be of inestimable profit to the student, the teacher, the university and the state, compassing, as it must eventually, an accepted body of principles—principles that may be taught fearlessly by teachers old and young, experienced or inexperienced, leading or led, and with a confidence and satisfaction akin to that pervading the domain of exact science.

On the relatively solid ground of such accepted doctrine the college graduate will take with him to his home and into the concerns of life something that will be to him an armor and a weapon always at hand—an economic code that shall be as a hand-book to the publicist, politician, and statesman—that shall make of the college men in Congress and Legislature not dreary followers of a groping public sentiment, or the confident advocates of exploded economic opinion, but instructors and leaders of their time.

T. N. CARVER: I suppose that the formation of the American Economic Association comes nearer marking an epoch in the development of economic science in America than any other event. But if the plans of Mr. Fillebrown, as foreshadowed in the resolution which he is going to propose, are carried out successfully, it will be an event second in importance only to the forma-

tion of this Association. Without mutual discussion and criticism, economics as a science could not make much headway; hence the formation of this association was of such great importance. But even with every opportunity for discussion, there is a limit to the progress which can be made if the different men can not come to an understanding upon the meaning of terms and elementary concepts.

Again, every one of us has heard it remarked literally hundreds of times, and has himself remarked dozens of times, that the chief value of these annual meetings is in the opportunities which they give us to meet one another and to talk informally in the corridors and other places, rather than in the formal discussions on the stated program. Now this scheme of continuous correspondence, if it is ably and tactfully directed, as Mr. Fillebrown has been directing a correspondence upon certain favorite topics of his for several years, would merely continue throughout the year these opportunities which we all so much prize, viz., the opportunities of mutual discussion and criticism. This would bear about the same relation to the formal publications of books and articles, as our informal talks at these meetings bear to the formal discussions on the stated programs. Therefore I hope that there will be a unanimous vote in favor of Mr. Fillebrown's resolution.

FRANK A. FETTER: I heartily approve of the plan as outlined by the chairman, but wish to warn against premature attempts to reach agreements on subjects where sufficient fundamental and critical work has not yet been done by individual students. In the case of a number of the leading terms and concepts of economics, it can hardly be doubted that the analysis has not yet been

satisfactorily made, and therefore a vote upon agreements could have only the harmful effect of crystallizing opinion into wrong forms. An important function of such a committee as is proposed would be the encouragement of special studies preparatory to the work of arriving at agreements.

CHARLES HILLMAN BROUGH: I am in hearty sympathy with this movement to secure substantial accord with reference to fundamental economic concepts. Unless we reach working agreements as to such terms as labor, capital, wealth, income, property, trusts, pools, corporations, franchises, quasi-public corporations, economic rent, socialism, and a single tax, economic writers and political theorists will sail upon the vast ocean of thought and original investigation without chart and compass. Although economics is not an exact science, in the sense that pure mathematics is, axioms and fundamental propositions must be adopted in the one as much as in the other. It is true that Arkansas and New Jersey do not agree in their present conception of a trust; hence, the wide divergence in the legislation on this important question in the two States. In Arkansas a trust is defined by the King-Davis Anti-Trust Act as "any combination organized in Arkansas or elsewhere for the purpose of fixing prices in Arkansas or elsewhere", while New Jersey adopts the more comfortably capitalistic conception of "any combination organized elsewhere than in New Jersey for the purpose of fixing prices in New Jersey". Arkansas holds that all monopolies are evil *per se*; while New Jersey believes that any corporation that pays tribute to the revenue of New Jersey is essentially benevolent, regardless of its effects on the people of other States. Both of these propositions are radical

and leave no margin for a difference between good and evil combinations, between those that do not water stock, do not undersell weaker competitors in the local markets, and receive no secret concessions or discriminations, and monopolies which owe their very existence and strength to the use of these unlawful "clubs". The legislators and economists in the different States and in the United States at large should agree on the fundamental concepts; otherwise, we shall have "confusion worse confounded."

J. H. HOLLANDER: The immense value of such a plan as that proposed by Mr. Fillebrown is the standardization of concepts and terms. It by no means follows that agreements such as are therein proposed will forthwith be attained among economists, but there will at least be a definite understanding as to precisely what each term means, and economic discussion will be spared the interminable waste of time and effort consumed in merely dialectical debate. No small part of the slower progress of economic science as compared with natural science is to be ascribed to the looseness and inexactness of nomenclature and terminology. It is unnecessary, indeed even undesirable, at this stage, that such attempted standardization should extend to controverted principles. The prime need is the purely technical advantage growing out of the use of one term at all times to express one concept.

ECONOMIC THEORY AND LABOR LEGISLATION

RICHARD T. ELY.

It is in every way fitting that the first annual meeting of the American Association for Labor Legislation should be held in connection with the annual meeting of the American Economic Association. Steps were taken to organize the American Association for Labor Legislation at the Baltimore meeting of the American Economic Association¹; and the committee appointed at that time to effect the organization consisted of members of the latter association, as do nearly all the members of our Association. Thus the old Association is the parent of the younger in a direct and very obvious way. But other reasons for the fitness of this joint meeting, although they lie less on the surface, are quite as important.

The joint meeting with the American body which represents the science of economics in the United States at once suggests a connection between economic theory and labor legislation. As a matter of fact when the American Economic Association was organized at Saratoga, on the 9th of September, 1885, the Constitution embraced a Statement of Principles, which was adopted as not in any sense a creed but "as a general indication of the views and the purposes of those who founded" the Association. The following is a quotation from this "Statement of Principles":

"We hold that the conflict of labor and capital has

¹ In 1905.

brought into prominence a vast number of social problems whose solution requires the united efforts, each in its own sphere, of the church, of the state, and of science."

It is thus stated, in effect, that the labor question, or—more accurately—the many labor problems of our time require legislation, and it is obviously implied that economic science must furnish guidance to legislation. This clearly shows that in 1885 the economists of the country, generally speaking, assumed no attitude of antagonism to labor legislation, nor have the professorial and professional economists of this country, except in isolated instances, assumed any attitude of antagonism to labor legislation as such since that time. The Statement of Principles was dropped later and that without opposition, because even those who proposed and especially favored it at first, felt that they had won their battle and that the Statement had accomplished its purpose. While there was some opposition to the American Economic Association based on general grounds which cannot be here discussed, and while there was some opposition in the press and on the part of a few economists to the position taken with respect to labor legislation, it is significant that no opposition to the formation of the American Association for Labor Legislation made itself heard, and that among the economists who took an active part in its formation were men who would perhaps generally be designated as "hard-headed"—whatever that may mean—and conservative. Yet ours is an association the very title of which assumes the necessity and desirability of labor legislation. While it is true that the economists of 1885 were in favor of "wise and sane" labor legislation, a perusal of the published utterances of 1885 with reference to the American Economic Association shows that since that time a sur-

prising change of public opinion has taken place, and in my own opinion, this change is an evidence of the influence the economists have exerted—an influence the magnitude of which furthermore in my own opinion—for I do not assume to speak for anyone else—the economists themselves frequently do not fully appreciate.

But what has been the position of economic theory in the past with regard to labor legislation? Has it been, as popularly supposed, hostile to such legislation? Or has it been as hostile as popularly supposed? Manifestly, it is quite out of the question now and here to enter exhaustively into this chapter in the history of economic thought, but the general drift of economic theory may be briefly indicated.

The economists of the latter half of the 18th century who founded modern political economy as a distinct and separate branch of knowledge, Quesnay and his associates, Adam Smith and his associates, were opposed to what is called legislative interference in the realm of the economic life. And they opposed, generally speaking, labor legislation. They favored, as we all know, a passive policy of government and used as a maxim *laissez-faire*. But how often does the same phrase, term, or watchword mean one thing in one stage of evolution and quite the opposite in a later! We must not at once, then, jump to the conclusion that we have to do in the case of these men with any antagonism to the interests of labor. In fact, these men were such warm-hearted humanitarians, that they would perhaps scarcely rank among the "hard-headed" economists. One has only to read their lives and to follow closely their writings to become entirely convinced that they had, in high degree even, what is now called "the enthusiasm of humanity", and were animated with a passionate desire for

improvement in human affairs and particularly for the uplift of the lower orders.

The eighteenth century economic philosophy was, however, as we all know, based on a now discredited and discarded belief in a beneficent code of nature, ruling the economic life as all other social life spheres, and which, if not interfered with, would bring to all classes and especially the workers, the maximum amount of economic well-being. But in addition to this general view, we have as an explanation of their position the multitude of restrictions, and old-established monopolies and special privileges which oppressed the manual toiler and to the removal of which they directed their attention. It is noteworthy that Turgot, notwithstanding his general negative economic philosophy, favored a system of public education which France did not achieve for a hundred years, and which a modern economist has said reminds one of socialist demands, while Adam Smith, in denouncing labor laws, said if a labor law chanced to be in the interest of labor it was sure to be a just law. How different is the position of a man, who, in denouncing labor laws, has in mind laws oppressive to labor, from the position of a man a century later who, in denouncing labor legislation, has in mind laws passed in the interest of labor!²

² That we must always bear in mind the circumstances of time and place when we discuss economic theory and its relations to social interests in general and to labor in particular, is strikingly shown in the designation "Liberal School of Political Economy" in the history of economic thought. This designation is frequently applied to Adam Smith and his followers, the classical economists in England, and their adherents elsewhere. Thus Eisenhart entitles the second book of his *Geschichte der Nationalökonomik* "Critical-Liberal Individualistic Period" (*Kritisch-liberale, individualistische Periode*). In this connection the word "liberal" now carries with it the implication of an extreme conservatism, yet at one time "liberal

When it comes to the evils of monopoly, the words of Adam Smith would, I fear, if repeated as original utterances by economists of our own day, be denounced by some newspaper writers as demagoguery. "Malignant and invidious," "malignant and mean" are epithets which he used in describing the monopolistic policy pursued by his own country with reference to a powerful company, namely, the East India Company.

It would be interesting to go into the theories of distribution of the writers we are now discussing and to examine them with reference to the possibilities of labor legislation, but the time is too brief. It may, however, safely be said that while Turgot's theory of wages does not leave a very wide margin for an increase of the remuneration of labor, there is nothing in these theories which, if true, would necessarily preclude a substantial improvement in the position of the wage-earner.

The development of classical political economy in England, in the first half of the 19th century, marks an epoch in the history of economic theory in its relation to labor legislation. Two theories were brought forward, elaborated and emphasized so strongly as to enter into popular consciousness and to become part and parcel of the working capital of powerful groups of newspaper writers, publicists, and legislators; and these two doctrines were used against trade-union policies and legislation alike. Every economist at once knows that I refer to the theory of population associated with the name of

school doctrines" were really liberal. They became conservative by changes in the evolution of economic society.

It is interesting to notice a similar change in the term "liberal" as applied to a very conservative political party in Germany, so that the term "liberal" in that country at least has very often come to carry with it the idea of an excess of conservatism.

Malthus and to the wages-fund theory. While the wages-fund theory, as found in most writers, was more or less vague and frequently indistinct in its outlines and even, I think we may say, elusive, it was gradually elaborated in the development of economic thought and became something very real, very definite, tangible, in the writings of popularizers, and it was thus an effective weapon in the hands of opponents of protective labor legislation. As Professor Taussig has shown in his history of the theory,⁸ the great economists generally did not hold this doctrine in such form as necessarily to preclude on their part legislative efforts to improve the lot of the wage-earner; it did receive in many places in Mill's *Political Economy* a precise form and was so stated by him that its natural tendencies were antagonistic to the Factory Acts. Undoubtedly, it is likewise true that Mill gave the most clear-cut formulation of it when he renounced it; but this very renunciation showed its possible popular uses.

Malthus demonstrated, as he thought, the existence of a powerful force immanent in mankind, the working of which tended to increase population beyond the means of subsistence; and he maintained that the operation of checks to the growth of population kept some kind of equilibrium between food supply and mouths clamoring for food. Misery, vice, war, pestilence, famine, and the like constituted the one class of checks; prudential restraints of a variety of kinds constituted the other class of checks. Every measure had then to be examined with reference to its effect on the growth of population; and if labor legislation rendered the lot of the laborer more desirable for the time being, but increased population, there was always danger, so it was claimed, that the total final effect would be simply a larger population—but, by

⁸ Part II of his *Wages and Capital*.

reason of the pressure on the means of subsistence, not a more prosperous population. How easily this could lend itself to "the special pleaders of capital"—if we may employ this expression—is readily apparent. Easy indeed was it for the penny-a-liner to rail at the humanitarian. Let the people exercise self-control in the matter of marriage and, by establishing a better proportion between the means of subsistence and mouths to be fed, improve their own lot! Or why adopt measures, temporarily benefiting the wage-earner, but eventually pulling all classes down to his dead level?

But the adverse influence of the Malthusian theory of population upon labor legislation made itself felt in the minds and utterances of those who were warm humanitarians and who were among the truest friends of labor of the nineteenth century. Apprehension of the dire possible effects upon the growth of population of apparently beneficial labor legislation always cast a shadow over the generally hopeful anticipations of John Stuart Mill. If the check to population were weakened by measures, otherwise seemingly beneficent, the ultimate result according to Mill would be that it would remove "everything which places mankind above a nest of ants or a colony of beavers".⁴ Mill would have been ready enough—as he tells us in the same chapter of his *Political Economy* from which I have just quoted—to favor even such a measure as a legally established minimum of wages, had he not feared that as a result we should have overpopulation.

The wages-fund theory supplemented the theory of population so completely as to convey to many minds a clear conviction of the futility of all labor legislation. A certain fund of capital was set aside for the payment of

⁴ *Political Economy*, Book II, Ch. XII, Sec. 2, p. 220, People's Ed.

wages, this was distributed among the existing laboring population in any event, and the only way in which substantial improvement in the lot of the wage-earner could take place was to increase the wages-fund relatively to the laboring population. What room was there then for legislation? If wages were raised by law or public opinion without a change in this proportion, the result must be to favor a group of laborers at the expense of other laborers. To quote Mill again: "Since, therefore, the rate of wages which results from competition distributes the whole wages-fund among the whole laboring population, if law or opinion succeeds in fixing wages above this rate, some laborers are kept out of employment."⁶

Cairnes examines the obstacles to improvement found in these theories of wages and capital and in the law of rent, and concludes that only by a change to coöperation, adding profits to wages, can any substantial improvement in the lot of the toiling masses be secured. It is worth while to quote from him at some length, for we are in danger of forgetting the extent to which in their tendencies the teachings of even the leaders of economic thought were opposed to combination and labor legislation. The following is quoted from Cairnes' *Leading Principles*:

"It appears to me that the condition of any substantial improvement of a permanent kind in the labourer's lot is that the separation of industrial classes into labourers and capitalists which now prevails shall *not* be maintained; that the labourer shall cease to be a mere labourer—in a word, that profits shall be brought to reinforce the wages-fund. I have shown that, in order to any improvement at all of a permanent kind, a restraint must be enforced on population which shall prevent the

⁶ Mill: *Political Economy*, Book II, Ch. XII, Sec. 1, p. 219, People's Ed.

increased demands for subsistence from neutralizing the gains arising from industrial progress; and that even a very great change in this respect in the habits of the people—a change far greater than there are any good reasons for anticipating—would still leave them, while they remain mere labourers, in a position not very materially better than at present. But the significance of these considerations becomes much enhanced when they are connected with another doctrine established in a former chapter of this work. It was there shown, that, in the order of economic development, the wages-fund of a country grows more slowly than its general capital. Now the wages-fund of a country represents the means of the labouring classes as a whole; the general capital, the means of those who live upon profit—we may say broadly of the richer classes. It appears, therefore, that the fund available for those who live by labour tends, in the progress of society, while growing actually larger, to become a constantly smaller fraction of the entire national wealth. If, then, the means of any one class of society are to be permanently limited to this fund, it is evident, assuming that the progress of its members keeps pace with that of other classes, that its material condition in relation to theirs cannot but decline. Now, as it would be futile to expect on the part of the poorest and most ignorant of the population self-denial and prudence greater than that actually practised by the classes above them, the circumstances of whose life are so much more favourable than theirs for the cultivation of these virtues, the conclusion to which I am brought is this, that, unequal as is the distribution of wealth already in this country, the tendency of industrial progress—on the supposition that the present separation between industrial classes is maintained—is towards an inequality greater still. The rich will be growing richer; and the poor, at least relatively, poorer. It seems to me, apart altogether from the question of the labourer's interest, that these are not conditions which furnish a solid basis for a progressive social state; but, having regard to that interest, I think the considerations adduced show that the first and indispens-

able step towards any serious amendment of the labourer's lot is that he should be, in one way or other, lifted out of the groove in which he at present works, and placed in a position compatible with his becoming a sharer in equal proportion with others in the general advantages arising from industrial progress."⁶

These doctrines are familiar to every economic thinker. I cannot here trace their development, as this is too long a chapter in the history of economic thought.

I should like, were there time, to speak about the wages-fund theory as it was modified by Cairnes, who attempted to rescue it, but succeeded in leaving little meaning to it. I should be glad also if there were time to speak about the able treatment of the wages-fund theory by a former president of the American Economic Association, namely, Professor Taussig, who, while seeing a large amount of truth in the wages-fund theory, finds sufficient elasticity in the possible amount of wealth which may be used for wages to provide for substantial improvement either by trade union action or legislation. It would be especially gratifying to me to discuss the theory of wages of the first president of the American Economic Association, the late General Francis A. Walker. His residual claimant theory of wages stands in no opposition to labor legislation. He himself expressly affirmed the need of positive, resolute action on the part of wage-earners to enable them to secure the full competitive wage. Another former president of the Association, namely, Professor J. B. Clark, has advanced the productivity theory, which is being so much debated at the present time, and this theory also, if true, does not preclude the possibility of substantial improvement on the part of the wage-earner by legislation. There is, in

⁶ Cairns: *Leading Principles of Political Economy*, pp. 339-40.

short, no theory of wages now widely accepted by economists in this and other lands which in itself need produce opposition to labor legislation.

The theory of population has not been treated with such exhaustiveness and thoroughness by recent economists as has the theory of wages. In fact, in recent literature this theory has been, relatively speaking, neglected by economists. It is, however, generally admitted that there are forces restricting undue growth of population, acting with an ease and readiness little dreamed of by Malthus. Consequently, while the modern economist would probably say that the theory of population cannot be wholly neglected in the discussion of labor legislation, and while he would say that on account of the possible growth of population it is necessary to be prudent and careful, it would be difficult to quote any considerable weighty body of modern economic opinion against "wise and sane" labor legislation.

Two or three things should be very clearly and definitely stated in any discussion of the attitude of the early economists with respect to trade unions as well as with respect to labor legislation. One is that no great economists ever approached the subject with the thought of strengthening capital at the expense of labor. I believe it can be successfully maintained that every one of the really great economists, without exception, has had it in mind to raise wages rather than profits whenever it was necessary to make a choice between the two. Professor Alfred Marshall, in the very opening chapter of his *Principles of Economics*, says that it is "the hope that poverty and ignorance may gradually be extinguished . . . which gives to economic studies their chief and their highest interest".⁷ William Nassau Senior, who

⁷ Book I, Ch. II, Sec. 2.

perhaps has sometimes been regarded as peculiarly hard-hearted and hard-headed, states, at the age of five and twenty, he "determined to reform the condition of the poor in England". Malthus clearly desired the elevation of the wage-earner, and, while on the whole his views were pessimistic in their tendencies, he believed that a full knowledge of the truth would result in improving the lot of the wage-earner. Ricardo had so much sympathy with the "submerged tenth" as to maintain at his own expense two almshouses.⁸ John Stuart Mill was ready enough to sacrifice the interests of wealth to the laboring population if he could only be convinced that thereby the condition of the masses would be really improved.

Another thing that needs to be borne in mind is that we must draw a sharp line between the teachings of the great economists and the teachings of the smaller men who followed after them, and who, pushing things to apparently logical conclusions, omitted necessary qualification, and exaggerated greatly their errors. We have to do here with "epigones"—if we may borrow the term familiar in German economic literature.

And then we come to those who cannot be strictly called economists at all, but who have attempted to utilize the teachings of the economists for their own purposes. Here we have a still wider departure from the teachings of the masters.

But, while the great economists have been true humanitarians—and there certainly were very few, if any, exceptions—they have been often enough dogmatic, and

⁸ In the Preface to his *Treatise on the Circumstances which Determine the Rate of Wages*, J. R. McCulloch says, with apparent sincerity, that the wish to contribute to the improvement of the laboring classes in England alone led him to publish his work.

their dogmatism has been exaggerated by the small men of whom I have spoken. Those who have opposed the real or supposed teachings of orthodox economists have been called by all sorts of epithets, such as socialists, anarchists, muddle-headed, etc. So the late Amos G. Warner met with a good deal of sympathy, when in his classical *American Charities* he said, "from 1850 to 1880 Cromwell's exhortation to the theologians of his time might properly have been addressed to the English economists: 'In the bowels of the Lord, I beseech you, brethren, to consider it possible that you may be mistaken!' Indeed, equivalent exhortations were addressed to them, but without effect".⁹

Many quotations could be given showing the dogmatism of the classical economists; and even those most appreciative of their services cannot deny that in this particular they were guilty of gross error, which has reacted seriously to the impairment of their influence. They did indeed discover a great deal of truth of deep-reaching and far-extending importance; but they little appreciated how much they had left their successors to do.

One fundamental error lay in identifying social laws with the unchangeable laws of external physical nature. Ideas of evolution and relativity had not then entered into the consciousness even of the greatest English economists. The theory of population and the wages-fund theory were nature's laws against which ignorant and presumptuous mortals set themselves in vain in trade union and labor legislation. Notice this, furthermore: the opponents of trade-unionism and labor legislation alike, use *God* and *divine* and *Nature* and *natural* interchangeably, while *artificial* in the sense of *unnatural* would be the term used of any increase of wages for the

⁹ P. 20.

time being brought about by legislation or trade-unionism. James Stirling, in his pamphlet on *Trades Unions*, says that these organizations injure labor whether they fail in securing at once higher wages or whether they succeed in securing a "seeming success"; and he says that in this case the ultimate result is even worse. He tells us the natural limits to wages are set by the laws governing the increase of population and the increase of capital, and we are assured that "the presumptuous mortal, who dares to set his selfish will against divine ordinances, brings on his head inevitable retribution; his momentary prosperity disappears, and he pays, in prolonged suffering, the penalty of his suicidal success".¹⁰

It may be said that Stirling is a mere epigone, but it cannot be successfully maintained that he lacked support on the part of leaders of thought, for we find the careful Cairnes, after discoursing on the barriers to wages found in the wages-fund, the growth of population, and the law of rent, saying, "Against these barriers trades unions must dash themselves in vain. They are not to be broken through or eluded by any combinations, however universal; for they are the barriers set by Nature herself".¹¹ Cairnes, to be sure, speaks of trades unions here, but obviously his argument would hold against labor legislation.

Another doctrine naturally making against labor legislation was the theory of a minimum profit, taught by John Stuart Mill. Any action harmful to capital by restricting its accumulation could only result in the attainment of this minimum with a smaller amount of capital than would otherwise come into existence.

It cannot be denied, then, that the four doctrines con-

¹⁰ P. 36.

¹¹ Cairnes: *Some Leading Principles of Political Economy*, p. 338.

sidered, viz., the Malthusian theory of population, the wages-fund theory, the Ricardian theory of rent, and Mill's theory of a minimum of profits, constituting the framework of accepted economic theory, hemmed in and limited very effectively the hope of improvement by labor legislation. And, as to the force that these theories have had, there can be no doubt on the part of those who have endeavored to secure labor legislation; nor has this force even as yet spent itself. The press, the legislative bodies of our day, and the judiciary, all alike reveal its existence.

But it is to be noticed that men are often better than their theories. McCulloch, an adherent of the classical school who ranks among the epigones, was one of the comparatively few economists to encourage and help the seventh Earl of Shaftesbury in securing the factory legislation of England; and late in life Senior saw the error of his opposition to labor legislation.

Nevertheless, the Earl of Shaftesbury, while acknowledging gratefully the encouragement that he received from McCulloch, mentions particularly the fact that he received very little support from economists generally, while the leaders of the so-called Manchester School, Cobden and Bright, doubtless epigones rather than leaders, were among his opponents. He says: "Bright was ever my most malignant opponent. Cobden, though bitterly hostile, was better than Bright. He abstained from opposition on the Collieries Bill, and gave positive support on the Calico Print-works Bill."¹²

His biographer, Mr. Edwin Hodder, says that his chief opponents "belonged to that party which appeared to look for a social millennium, to be brought about by the rigid application of the dogmas of political economy, and who

¹² Hodder: *Life and Work of the Seventh Earl of Shaftesbury*, Ed. 1886, Vol. II, p. 210.

considered that he was endeavoring to limit freedom of contract, and in other ways unduly to interfere between capital and labour. Miss Harriet Martineau may be quoted as the exponent of the views of this party".¹³

Even McCulloch was not willing to interfere between adults and masters, although he said it was "absurd to contend that children have the power to judge for themselves as to such a matter".¹⁴

The political economists in many instances changed their views later; for example, both Harriet Martineau and Senior. But we clearly see that economic theory restrained them from taking that action which would have been dictated by their sympathies and which, indeed, science itself has subsequently come to approve.

The economic grounds for labor legislation are revealed best when the subject is approached from the viewpoint of contract or the economic bargain, considered particularly in its legal aspect and with respect to underlying economic causes.

Contract is static, not dynamic. Through contract the actually existing economic forces manifest themselves with all their inequalities and injustices. When economic forces make possible oppression and deprivation of liberty, oppression and deprivation of liberty express themselves in contract. Whenever modern slavery or a near approach to modern slavery exists, it assumes almost invariably the form of voluntary contract. One may take up peonage in this country and slavery in Africa and discover regularly contract forms existing as the legal bonds of involuntary servitude. It is the form of freedom clothing slavery. As contract is static, progress must consist at every step in the regulation and control of con-

¹³ *Id.*, Vol. I, p. 517.

¹⁴ *Id.*, Vol. I, p. 157.

tract. Such has been the case everywhere, and in England in particular, but in the civilized world at large an impressive history of social progress can be written showing how at every step it has restricted contract rights and invaded so-called free contract. But notice that it is only the form of freedom which has been violated. The purpose has always been a larger freedom; a true constructive freedom as an opportunity for the expression of powers and a sphere of activity.

The employer in past times thought his liberty invaded when he could not contract for an unlimited number of hours' work for children of any age. Laws forbidding this liberty and establishing schools with compulsory education, when well enforced, free children from oppression and afford them opportunity to develop their powers, to acquire property, and to make contracts later in life; contracts through which more nearly balanced economic forces express themselves. The case which is generally admitted with respect to children was well stated by John Stuart Mill in his *Political Economy* sixty years ago in these words: "It is right that children, and young persons not yet arrived at maturity, should be protected, so far as the eye and hand of the state can reach, from being over-worked. Labouring for too many hours in the day, or on work beyond their strength, should not be permitted to them, for if permitted it may always be compelled. Freedom of contract, in the case of children, is but another word for freedom of coercion. Education also, the best which circumstances admit of their receiving, is not a thing which parents or relatives, from indifference, jealousy, or avarice, should have it in their power to withhold."¹⁵

¹⁵ Mill: *Principles of Political Economy*, Book V, Ch. XI, Sec. 9, p. 578, People's Ed.

The legislation of the civilized world, as a whole, shows acquiescence in the proposition that sanitary and moral conditions and hours of labor of women must be regulated, and that for them night work in factories should be sharply limited, if not altogether prohibited; for otherwise uncontrolled economic forces operating through contract deprive them of liberty and of the right to acquire property and lead wholesome lives. No woman desires to work twelve and thirteen hours daily in a factory; and contracts for such toil are involuntary in substance even if voluntary in form. A ten-hour day for women, such as has been passed in Massachusetts and sustained by the Supreme Court of that state, does not deprive "Mary Holmes" of liberty—it affords her liberty. It does not restrict her right to work; it enlarges that right; for it conserves her health and strength and lengthens out the period of profitable work. If she is a mother, it also enlarges the freedom of her children and adds to their efficiency by giving her at least some shreds of time and strength for her family. For one who really understands the facts and forces involved, it is mere juggling with words and empty legal phrases to maintain the opposite. Realism, based on statistics and scientific investigations, fully sustain the soundness of such labor legislation. There is no better illustration of the lengths to which doctrinaire assumptions may carry an intelligent man, even a man of great capacity, than the position John Stuart Mill took with respect to protective labor legislation for women.

Mill was brought up under the influence of the eighteenth century philosophy of individualism; and the natural equality among human beings, as a corner stone of that philosophy, he attributed to women as well as men. The actual inequality and disadvantage of women in the

economic sphere he could not fail to notice, but this he ascribed to the political and matrimonial subjection of women. He favored, consequently, the emancipation of women from the bonds of custom and law and then he thought that they, as well as men, could take care of themselves in the labor contract without the aid of special protective legislation.

“Among those members of the community”, says Mill, “whose freedom of contract ought to be controlled by the legislature for their own protection, on account (it is said) of their dependent position, it is frequently proposed to include women: and in the existing Factory Act, their labour, in common with that of young persons, has been placed under peculiar restrictions. But the classing together, for this and other purposes, of women and children, appears to me both indefensible in principle and mischievous in practice. Children below a certain age *cannot* judge or act for themselves; up to a considerably greater age they are inevitably more or less disqualified for doing so; but women are as capable as men of appreciating and managing their own concerns, and the only hindrance to their doing so arises from the injustice of their present social position. So long as the law makes everything which the wife requires, the property of the husband, while by compelling her to live with him it forces her to submit to almost any amount of moral and even physical tyranny which he may choose to inflict, there is some ground for regarding every act done by her as done under coercion: but it is the great error of reformers and philanthropists in our time, to nibble at the consequences of unjust power instead of redressing the injustice itself. If women had as absolute control as men have, over their own persons and their own patrimony or acquisitions, there would be no plea for limiting their hours of labouring for themselves, in order that they might have time to labour for the husband, in what is called by the advocates of restriction, *his* home. Women employed in factories are the only women in the

labouring rank of life whose position is not that of slaves and drudges; precisely because they cannot easily be compelled to work and earn wages in factories against their will. For improving the condition of women, it should, on the contrary, be an object to give them the readiest access to independent industrial employment, instead of closing, either entirely or partially, that which is already open to them."¹⁶

A scientific examination of the facts of the case fails altogether to bear out Mill's position. The suffrage and the fullest measure of right over property and persons have failed to place woman on a footing of economic equality with men. The reason for her economic disabilities are as profound as her sex differences and must be reckoned with in any realistic legislation. This is the verdict of the world's civilization.

But until recently economists were inclined to limit regulation of labor conditions and especially hours of toil to children, young persons, and women, leaving adult men "free", so it was said, to make their own contracts. But experience has shown conclusively that while adult males as a rule are in a far better position in the labor contract than the classes just mentioned, unregulated contract does not always conduce to freedom and fair opportunity—"the square deal"—but frequently means bondage and degradation. A realistic political economy must recognize the facts of the actual world, and does so.

Adverse conditions are often so strong for classes of adult males that well-considered and strongly enforced legislation is necessary to secure freedom from the bondage that would result from them if uncontrolled by social regulation; for here, as so generally, the purpose of statute law is to assist men to gain control over the

¹⁶ Mill: *Principles of Political Economy*, Book V, Ch. XI, Sec. 9, p. 579, People's Ed.

cruel and tyrannical action of uncontrolled nature and society.

We must not take the view of the state as something external, stepping in and interfering with liberty. The action that we have in mind is rather the result of the coöperative efforts of men to determine the conditions of toil and to enlarge their free sphere of economic action.

The well-being of the adult male is as precious to the State as that of women, young persons, and children; and indeed the welfare of these latter classes is normally intertwined inextricably with his strength, vigor, and prosperity. And for adult males, hours of toil on rail-ways, the world over, must be limited in their own behalf as well as in behalf of the general traveling public in order to promote safety. This position is practically conceded in every civilized country.

It has also been necessary to regulate hours of toil of street-car employees. Before limited by law the regular working time of this class of workers in Baltimore was over seventeen hours a day and they were deprived of liberty in any possible realistic and positive sense of the term, while at the same time the women and children of their families suffered by the cruel "free play of economic forces" to use that familiar but unphilosophical and inexact phrase.

Bakers are a class of workers who, for a variety of reasons, are unable to secure hours of labor and conditions of toil, wholesome for themselves and for others. They are short-lived and unhealthy; and, if modern scientific investigations have made any one thing clear, it is that bad sanitary conditions and excessive hours of labor, bringing bad health to toilers, are a menace to the public health. We are here dealing with actual conditions,

which it is the function of Departments of Labor, as a branch of the executive department of government so to work up and present to the judiciary that judicial notice must be taken of them. Instead of confining themselves so largely to gathering miscellaneous statistics—too often, after all, almost meaningless—labor bureaus should have it as one of their main functions to investigate, exhaustively and scientifically, labor questions before the legislatures and courts; and the law should make their findings *primâ facie* evidence in all cases, following in this particular the Wisconsin Railway Rate Commission Law in the case of a just and reasonable rate.

It would seem to be a weakness in the New York Bakers Case, entitled "Joseph Lochner Plaintiff in Error vs. the People of the State of New York", that the facts had not been adequately investigated by another branch of the government and that in consequence they were not presented to the Court as they should have been. The case resulted in one of the familiar "five to four" decisions. In other words, by a majority of one, the Supreme Court of the United States, on April 17, 1906, held that it was not a proper exercise of the police power to restrict the hours of labor of bakers to ten a day and that consequently the New York statute was unconstitutional, because in contravention of the "liberty of the individual protected by the Fourteenth Amendment of the Federal Constitution," according to which "no State can deprive any person of life, liberty, or property without due process of law". And liberty to make contracts is held to be part of that liberty thus guaranteed as well as a property right. It is admitted that under the exercise of the police power in the interests of the general welfare, contract may be limited and regulated. The majority

opinion declares this New York statute "not within any fair meaning of the term a health law". Here the majority are clearly wrong, for they have the facts against them. But also, as Mr. Justice Holmes says in his dissenting opinion, this decision embodies an economic theory and an outlived and outworn economic theory—the economic individualism of the eighteenth century. Mr. Justice Peckham, the writer of the majority opinion, says, "Statutes of the nature of these under review, limiting the hours in which grown and intelligent men may labor to earn their living, are mere meddlesome interferences with the rights of the individual". This is totally unscientific and is a position that, because untrue, must be abandoned: as is shown by the minority—here, as so often in history, right.¹⁷

Let no one say that economics or any other branch of science may not criticise in our free land the judiciary. We know no infallible authority in the state, and to blame science for pointing out errors of courts is craven and

"It is pointed out in the majority opinion that the New York law had no emergency clause. It may be that there is a real weakness, although even this cannot be admitted without an examination of the technical nature of the case. The words of the decision are worth quoting in this connection:

"Among the later cases where the State law has been upheld by this court is that of *Holden v. Hardy* (169 U. S. 366). A provision in the act of the legislature of Utah was there under consideration, the act limiting the employment of workmen in all underground mines or workings, to eight hours per day, 'except in cases of emergency, where life or property is in imminent danger'. It also limited the hours of labor in smelting and other institutions for the reduction or refining of ores or metals to eight hours per day, except in like cases of emergency. The act was held to be a valid exercise of the police powers of the State. . . .

"It will be observed that, even with regard to that class of labor, the Utah statute provided for cases of emergency wherein the provisions of the statute would not apply. The statute now before this court has no emergency clause in it, and, if the statute is valid, there are no circumstances and no emergencies under which the slightest violation of the provisions of the act would be innocent. There is nothing in *Holden v. Hardy* which covers the case now before us."

unmanly, contrary to the spirit of the founders of the Republic; and lacking in true respect to the Courts, because it implies that the Courts in turn are lacking in manliness and true Americanism.

But even Mr. Justice Holmes in his trenchant criticism of the majority decision, after saying truly "The Fourteenth Amendment does not enact Herbert Spencer's Social Statistics," implies in one place that while the statute may be an interference with liberty, it is an interference with liberty justified by beneficent results. The true position is that this statute represents a struggle for real, substantial liberty of which the bakers were deprived by the majority decision, retaining merely its empty shell; and indeed the learned justice himself says that he thinks the word *liberty* in the Fourteenth Amendment perverted "when it is held to prevent the natural outcome of a dominant opinion."

Science, then, can draw no arbitrary line between labor legislation for adults and labor legislation for women and children; but cases must be judged, as they arise, on their merits. But this need not preclude a painstaking and careful search for general principles, although supposed general principles have so often misled us in the past.

The International Association for Labor Legislation, of which our Association is the national section, draws no fixed line between legislation for adult males and labor legislation for women and children; and this represents the opinion of the best experts of the world—those who conservatively, and as agents of governments, are investigating labor questions.

But what has been said must not be taken to mean that economists endorse all proposals for labor legislation. Many—nay, most—such proposals they would with practical unanimity hold to be impracticable and visionary,

while others with also substantial unanimity they would endorse. Varied tests of actually proposed labor legislation economists have learned to apply almost spontaneously. Influence on production must be considered, and, while to secure a better distribution or improved conditions of toil, the interests of production may be sacrificed to a limited extent, it is held to be necessary to proceed cautiously here.

John Stuart Mill says in one place:

"Whether the aggregate produce increases absolutely or not, is a thing in which, after a certain amount has been obtained, neither the legislator nor the philanthropist need feel any strong interest: but, that it should increase relatively to the number of those who share in it, is of the utmost possible importance."¹⁸

But economists at present would scarcely be disposed to go quite so far; for great as is present production, it can easily be shown statistically that production must still be largely increased to provide an economic basis for the satisfaction of rational wants.¹⁹ The mere distribution of great fortunes, or the wider diffusion of colossal incomes, even if it can be brought about, would be far from adequate. In other words the economic problem is a far larger problem than the problem of swollen fortunes.

Efficiency must be an ever present test, but economics insists upon the long view rather than the short view. If for the sake of a strong and virile population child labor must be prohibited, we can well content ourselves

¹⁸ Mill: *Political Economy*, Book IV, Ch. VII, Sec. 1, p. 455, People's Ed.

¹⁹ It is true that Mill says in the passage quoted "that after a certain amount has been obtained" an increased production is of minor significance. The implication is, however, very clearly that we have already reached that amount or nearly reached it, and that the problem of production is, relatively speaking, of no great significance.

with the greater production in the future and increased human welfare; and this is after all the end of all economic activity. Similarly, if shortening the hours of adult males on railways and in bake-shops adds to the length of life and promotes on the one hand safety and on the other hand public health, we can bear with equanimity the sacrifices of the form of freedom for the substance of a positive constructive policy of liberty; and can easily endure the curtailment of the right (really coercion) to work an unduly long number of hours in one day on account of the assured larger number of working hours in a lifetime.

The International Association for Labor Legislation, organized at the Paris Exposition in 1900, with a permanent bureau opened in Basel, Switzerland, in 1901, has as its special function the impartial scientific examination of labor measures and investigation of actual conditions underlying labor legislation. It is semi-private, also quasi-official in character. In other words it is a voluntary organization, largely of experts and officials, but it receives subventions from most civilized governments including a small one from our own federal government. Its activities are directed by men trained in economics and they give a good idea of the relation between economic theory and labor legislation.

The objects of the International Association are stated as follows: [in]

*Article II of the Statutes of the International Association
for Labor Legislation, defining the aims of the
Association.*

1. To serve as a bond of union to those who, in the different industrial countries, believe in the necessity of protective labor legislation.
2. To organize an International Labor Office, the

mission of which will to be publish in French, German, and English a periodical collection of labor laws in all countries, or to lend its support to a publication of that kind. This collection will contain:

(a) The text or the contents of all laws, regulations and ordinances in force relating to the protection of workingmen in general and notably to the labor of children and women, to the limitation of the hours of labor of male and adult workingmen, to Sunday rest, to periodic pauses, to the dangerous trades;

(b) An historical exposition relating to these laws and regulations;

(c) The gist of reports and official documents concerning the interpretation and execution of these laws and ordinances.

3. To facilitate the study of labor legislation in different countries, and, in particular, to furnish to the members of the Association information on the laws in force and on their application in different states.

4. To promote, by the preparation of memoranda or otherwise, the study of the question how an agreement of the different labor codes, and by which methods international statistics of labor may be secured.

5. To call meetings of international congresses of labor legislation.

The objects of the American Association, of which this is the first regular annual meeting, were adopted February 16, 1906, and are as follows:

(1) To serve as the American branch of the International Association for Labor Legislation, the aims of which are stated in the appended Article of its Statutes.

(2) To promote the uniformity of labor legislation in the United States.

(3) To encourage the study of labor legislation.

It will be noticed that uniformity among nations and among the states of the United States stands out as a prominent object. As competition extends its scope and becomes intense, justice to employers requires that they

should be placed under similar conditions, so far as protective labor legislation is concerned; so that success or failure of the employing capitalist may be determined by efficiency and not by varying degrees of oppression.

Working men are mentioned as worthy of consideration as well as women and children, and special attention is directed to the hours of adult males.

Dangerous trades are emphasized as requiring special attention; and researches have been made in regard to industrial poisons.

Among the reports issued by the International Association, the two following are noteworthy:

The night work of women in industry; reports on its extension and regulation, by various contributors, with a preface by Prof. Stephen Bauer, Jena, 1903, pages xlii, 384.

Injurious trades; reports on their dangers and means of prevention, especially in the manufacture of matches and in the lead industries. Edited with an introduction by Professor Bauer, Jena, 1903, pages lx, 460.

The International Association has organized the International Labor Office in Basel, Switzerland, the president of which is L. H. Scherrer, and the general secretary is Stephen Bauer. This office conceives its function to be purely scientific, and one of its duties is the publication of the invaluable Bulletin, which gives the labor laws of the world.

The annual assemblies take action with respect to various measures, and have directed their efforts largely to gaining information to lessen industrial poisoning, and especially lead and phosphorous poisoning, to prevent night work of young persons and women, and to secure a reasonable maximum work day for adult males, especially in mines and smelters.

The International Association has been especially helpful in initiating international labor legislation; and it is doubtless due to it more than to any other one agency that the world's first international treaty, especially designed to promote the interests of labor, was signed between France and Italy, April 15, 1905; a truly epoch-making event, of which President Sherrer says in his Report to the Fourth Meeting of Delegates:

"In his exposé, given two years ago, of this Franco-Italian Labour and Social-Protection Treaty, Herr Director Fontaine said of this good work that it would make an end to the complaints of French manufacturers about unfair competition; that to it Italy owes its present system of factory inspection and the protection of Italian workmen in France, and the more just administration of the Savings Bank deposits and Insurance annuities of Italian subjects. He also remarked that this treaty owed its origin to the suggestions made, and the discussions carried on during the time of our Meeting of Delegates in 1902."

Our Association does not take any partisan attitude in the controversies between economic classes in general and between employers and employees in particular. And it is allied to no particular party. It is consulted by many governments and by adherents of the various political parties of our day; by employers as well as by advocates of labor. Its only allegiance is to the general welfare.

We may thus say that the activities of our Association are directed by humanity, the beginning and end of all economics being man, but that its humanitarian ends are directed by scientific investigations. Its recommendations are carefully considered with respect to efficiency and fairness in international competition. It believes that it is best to precede action by deliberation, exhortation by

scientific study, and that progressive movements will in the end be more rapid if in every case they are based upon a well-thought-out, scientifically established program. In this practical and scientific work it invites general participation of the men of science, of the men of labor, of the men of capital, and generally of the men of leadership in industry and in State.

THE NORMAL LABOR DAY IN COAL MINES.

THOMAS K. URDAHL.

The length of the labor day in any industry depends partly on the nature of the industry itself, but more largely upon the stage of industrial development which the industry has attained. Nearly every industry passes through the handicraft or house industry stage, in which there is no regularity of wage or employment, and where hours may be excessively long or short according to the season. It frequently happens that the hours of labor that prevail in such an industry in the handicraft stage, are maintained long after it has envolved into the factory stage. Long hours are also often found in such industries as mining or milling, because they have grown up in village or agricultural communities, where the customary labor day is from sunrise till sunset.

When the factory stage is reached labor organizations also make their appearance, and strive for higher wages and shorter hours of labor. In the great majority of cases employers of labor believe that a reduction of hours or increase in wages is detrimental to the business concerned, and resist all such efforts on the part of union or industrial laborers. Some of the coal-mines of this country are still in the handicraft stage, the pick and donkey cart being used in about the same way they were in the eighteenth century. Here a ten or twelve hour or even longer day naturally prevails. Others have reached the stage of capitalistic production where mining machinery in the form of steam and electric coal cutters, coal conveyors, huge hoists and breakers and thousands of

workmen, make coal mining a regular business, very similar in its operation to a large factory. Here we have conditions more favorable to short hours, regularity of employment, and of uniform scale of wages.

The transition from the first to the second stage is not entirely due to the introduction of machinery, but to an even greater degree to the industrial development of the country itself. In the handicraft stage the market for coal was exceedingly uncertain and variable. The domestic or winter consumption of coal was by far the most important and the demand in summer was very small. The miner and operator was very often the same person, and worked his mine with the aid of a few workmen and boys. When demand ran short he would go out and look for buyers and having secured a few orders would call his men together and start work for a week or a month. Under such conditions it is evident that both the mine worker and the mine owner would be anxious to operate long hours in order to take advantage of the busy season.¹

In the capitalistic stage the demand for coal is much more uniform all the year round. The smelters, the ocean steamers, and the factories of the country need the same amount of coal in the summer as in the winter, and the demand fluctuates only slightly from year to year, or from winter to summer. A single ocean steamer, like the *Lusitania*, is said to use as much coal per week as a city of 25000 needs for domestic use. This stable demand makes it possible to operate regularly, and to profitably make use of a shorter labor day. Where demand is very great, these mines may often run two, or even three, eight hour shifts of men, in twenty-four hours.

¹See Chart I.

This rather stable demand seems at present to be largely supplied by mines operated by corporations who are either directly or indirectly under the control of the coal-carrying railroads, and in a large percentage of them a long labor day still prevails. In the anthracite mines, which are almost entirely controlled by the railroads, there were in 1906, ninety companies operating with a nine hour day, three with a ten hour day, and a half dozen companies where the hours of labor varied from six to ten hours. In West Virginia the four railroads appear to be rapidly getting control of all the coal fields and are heavily interested in the largest coal mines. The nine and ten hour day is said to prevail in the majority of the mines.

Side by side with these corporation mines, we have numerous smaller ones, many of which are still in the handicraft stage, where output is determined by the exceptional demand of the winter months or of periods of industrial prosperity.² Here the long labor day seems often to be as natural and as necessary as long hours in the summer months in agriculture. A legal limitation upon the labor day would probably force many of these operators to shut down or sell out to the more powerful competitors, thus hastening a process now going on, which ultimately will result in consolidation of the coal industry of the country. In the larger mines on the other hand, that is, the mines which have regular transportation facilities at their disposal, the shorter work day would be possible. Here the ten and twelve hour day appears as a sort of arrested industrial development, which has been retained by artificial means, long after it should have passed away.

Lack of organization on the part of the mine workers

² See part above the broken line B C in Chart I.

is the chief cause. This is often the result of conscious or unconscious efforts on the part of operators, to introduce alien laborers over whom the labor organizer has little or no influence.

Just as the immigrant is the feeder of the sweatshop and one of the chief causes of the long hours prevailing there, so the foreigner is the chief factor in the retention of the long hours in the coal industry. Where native American labor is employed we find the long labor day only in communities, like the Southern states, where coal mining is a new industry. This will perhaps explain the hostility of the union men to the foreigners, or "dagos" as they are termed in mining communities, and furthermore shows the intimate relation between the immigration problem and the length of the labor day.

GEOGRAPHICAL DISTRIBUTION OF THE EIGHT HOUR DAY.

We have, therefore, a very complex problem to consider. Geographically the so-called eight hour day is found in the central states and the Rocky Mountain region, and the long hours are found in the East and South. In the central states, *i. e.* Ohio, Indiana, Illinois, southwestern Pennsylvania, Kansas, Arkansas, Oklahoma, Texas, and parts of Iowa and Kentucky the short labor day has been obtained through the efforts of the miners' unions by making it a part of their joint agreements with the operators. In Pennsylvania and West Virginia and in parts of Maryland, Virginia, Alabama, Tennessee, and Georgia, the eight, ten, and eleven hour days prevail side by side, with a preponderance in favor of the ten and eleven hours.⁸ The Rocky Mountain states that have secured an eight hour day by legislation are Utah, Wyoming, Montana, Nevada, Colorado, and the

⁸ See Charts IV, V, and VI.

Central state, Missouri. The Colorado law was declared unconstitutional by the state supreme court, but in the other states the laws now seem to be in force.

CONSTITUTIONALITY OF EIGHT HOUR MINING LAWS.

The chief question concerning the constitutionality of such laws, is whether or not they violate the Fourteenth Amendment by abridging the privileges and immunities of citizens of the United States. In the famous Utah case of *Holden v. Hardy*,⁴ the United States Supreme Court decided this question with all the justices except Brewer and Peckham concurring. In this case the court in conclusion lays down the principle, that the class of employees does not stand on an equal footing with the employers. The employer makes the rules and the employees are practically constrained to obey them. Hence self interest is often an unsafe guide and the legislature may properly interpose its authority. It is not so much the right of contract of the employer that is interfered with, as that of the laborer, whose right to labor as long as he pleases is violated. The fact that both parties are of full age and competent to contract does not necessarily deprive the state of its right to interfere where the parties do not stand on an equality and public health demands that one party to the contract shall be protected against himself. The state is no greater than the sum of its parts, and when the individual health is sacrificed the state must suffer. Some years later this decision had been handed down, a similar law in New York restricting the hours of bakers to sixty per week came before the Supreme Court for adjudication. The opinion of the Court, this time, delivered by Justice Peckham, ran in part as follows:⁵

⁴ 169 U. S. 366.

⁵ *Lochner v. New York*, 25 Sup. Court Rep. 539.

"There is no reasonable ground for interfering with the liberty of person or the right of free contract by determining the hours of labor in the occupation of a baker. There is no contention that bakers as a class are not equal in intelligence and capacity to men in other trades or that they are unable to assert their rights and care for themselves. . . . There is in our judgment no reasonable foundation for holding it to be necessary or appropriate as a health law to safeguard public health or the health of the individuals who are following the trade of a baker. . . . Under such circumstances the freedom of the master and employee to contract with each other in relation to their employment and in defining the same cannot be prohibited or interfered with by law without violating the federal constitution."

It is evident from these cases that the court holds, that coal mining is a dangerous, unhealthy occupation, and that it is a part of the *police power* of a state to pass an eight hour statute for protection of the health of the miners. The result of the Utah decision is that the miners have an eight hour "bank to bank" day. This means that they are hoisted and lowered on the time of their employer instead of on their own time, and makes the effective work day about seven and one half hours. This decision of the United States Supreme Court is of the very greatest importance for future legislation in the interest of coal miners and makes it possible, wherever the state constitution does not forbid, to enact laws on this subject.

THE MINERS' EIGHT HOUR DAY IN FOREIGN COUNTRIES.

Eight hour legislation has not only been tried by the so-called sagebush legislators of the Rockies, but has been put into operation by three of the coal mining states of Europe. Austria was, in 1884, the first European

nation to limit by law the number of working hours in coal mines to ten. On January 27, 1901, the law was modified so as to reduce the labor day of all underground workers to nine hours from the time of entry to the completion of the outward journey, including the lunch period. This law went into effect in July, 1902, and reduced the labor day of seventy per cent. of all the coal miners of Austria to an actual working day of about eight hours.

France has also enacted legislation on this subject. To a certain extent this legislation is said to be due to the great strike following the frightful disaster at Courrières. The law, which was passed January 29, 1905, and became effective January 5, 1906, provides for a legal day of nine hours, calculated from the descent of the last miner into the shaft, to the arrival at the bank of the first worker at the end of the shift. This limit is to prevail during the two years, January 1906 to 1908, From 1908 to 1910 the working day may not exceed eight and one-half hours, and after January 5, 1910, the day is limited to eight hours. The law therefore provides for the introduction of an eight-hour day by two half hour stages extending through four years.

The French law, in contrast with the Austrian, does not apply to all underground workers, but only to hewers or pickmen who work in "abbatage", *i. e.* at the coal face. It seems highly probable, however, that it will be extended to all underground workers in the near future.

The only other European country which has at present in operation a legal limitation of the miners' labor day is Holland. Here also the law is of recent origin, and only came into operation on November 1, 1906. Up to January 1, 1908, the labor day in the Dutch coal mines shall not exceed nine hours, and after 1908, no man shall be

allowed to stay underground longer than eight and one-half hours a day, calculated from the beginning of the descent into the shaft to the beginning of the ascent at the end of the shift.

Aside from these cases and the experiments in Australasia, but a very little progress has been made toward the eight hour day by means of legislation. Numerous efforts have been made to secure such laws in England, Germany, and America. In England such men as Chamberlain, Balfour, and Sir Charles Dilke have advocated an eight hour day for coal miners, and no less than fourteen such bills have been introduced in Parliament during the past fifteen years.

Much progress has also been made as a result of the efforts of the laborers themselves. Each of the great miners' strikes in England, Germany, and America have thus far been mile stones in the eight-hour movement.

In the great German coal strike of 1889 the main demand of the miners was for "the eight-hour shift which we inherited from our ancestors". The outcome was an eight-and-one-half-hour day for about four-fifths of the coal miners of Germany. The operators granted a nominal eight-hour day, which was not to include the time taken in going from the bank to the place of work and return. In the strike of 1905, in which about 200,000 coal miners took part, the strikers demanded a system somewhat like the one introduced in France. They demanded a nine-hour day, including the time of entry and exit, for the year 1905, eight and one-half hours for the year 1906, and an eight-hour day after 1906.

The demands of the miners were not granted, and as a result bitter complaints are heard at present in all the mining communities of Germany, because the govern-

ment refuses to legislate on the alleged abuses in the coal mines. In Germany, as in America, legislation of this sort lies within the province of the individual state, and, with the exception of Prussia, they have thus far done nothing. In Prussia the working hours at the collieries are fixed by the labor regulations issued by the mine owners and sanctioned by the superior mining authority (Oberbergamt). This authority is empowered by the Diet to fix the length of the labor day in those cases where the health of the miners is endangered by the long hours. Thus far little has been done, except to provide that where the temperature in mines exceeds 28 degrees C. (=82.4 degrees F.), that the labor day shall not exceed six hours.

Even Belgium, where women and children are still found working long hours in the coal mines, has by royal decree appointed a commission to inquire into the effect of the limitation of hours in the mining industry. Much progress has therefore been made along the line of restricting the hours in the collieries, both by means of voluntary agreements between operators and miners and by legislation, and it seems highly probable that other states will soon adopt similar measures. Thus far such laws have been adopted only in the smaller coal-producing states of Europe and America. France produced about thirty-five and a half million tons in 1905, Austria thirty-five million, and Holland less than a million tons, whereas in America the output of all the Rocky Mountain states, that have enacted eight-hour laws, is very small compared with the enormous tonnage of Pennsylvania and West Virginia, which, according to the returns for 1906, are the two largest coal states of America.

America's real industrial rivals, Germany and England, whose output in 1905 was two hundred and thirty-six

and one hundred and seventy-four million tons respectively, have thus far failed to pass such laws. The advisability of such legislation for the largest coal-producing states, has therefore not been conclusively demonstrated. Before such measures can be advocated, it is necessary to determine what their effect upon the laborers will be, and whether the economic effects on the industry and commerce of the country make this kind of legislation desirable.

THE PRESENT LABOR DAY IN COAL MINES.

First, we must ascertain what the present hours of labor are, if we wish to judge of the effect of an eight-hour law upon the output and the conditions of the laborer. In a factory or other industrial plant it is comparatively easy to get at the hours of labor at any given time. But in coal mining we have often a variable work day according to the conditions in each mine. In some localities the mine is normally in operation ten hours each day, but most of the miners rarely work that length of time, because they are paid by the ton and not by the day, and may stop work whenever they please.

In many communities there are certain short days on which the miners stop work at noon. Where the native American predominates, the mines usually close at noon on Saturdays, because the miners wish to attend football, baseball or other games on that day. Then there are days on which no work is done, which, in addition to Sundays, are considered either legal or regular holidays. Where the foreign element is found, there are from twelve to fourteen Church holy days on which the mines have to close down. In England, where the average normal labor day is nine hours and three minutes, the loss of time due to these causes amounts to four hours

and twenty-five minutes per week, leaving an effective average of only forty-nine hours and fifty-three minutes per person for each normal week.

There is also much time lost in all collieries as a result of stoppage of the mines due to lack of orders, shortage of cars, strikes, lockouts, and accidents. The English labor and trade conditions are much more stable than the American, and yet the average loss of time due to these causes for the ten years ending 1906, was three hours and thirty-seven minutes per week, in normal weeks. This reduces the weekly average to forty-six hours and sixteen minutes. All this loss may be said to be due to causes over which the miner has little or no control, and may therefore be considered unavoidable. In addition to all this, there is everywhere a good deal of voluntary absenteeism not due to illness or any of the above causes. The miner simply stays away from work for a day or more at a time, and thus sometimes loses as much as half the available working time of the week. This sort of absenteeism is not confined to any one locality or to any particular season of the year, but occurs everywhere, in periods of abundant demand and full work, as well as in times of depression and short work. In England, again, the average amount of available work voluntarily withheld by the miners themselves for the period of 1899 to 1905 amounted to three hours and three minutes per week, leaving a balance of only forty-three hours and thirteen minutes, which may be considered the actual average number of hours for all classes in normal weeks.

It appears, therefore, that for the entire United Kingdom, out of the total possible fifty-four hours and eighteen minutes which the English coal miner may work in a normal week, that he actually does put in forty-three hours and thirteen minutes, or seven and one-fourth

hours per day. These seven and one-fourth hours not only include the time which he actually works at the coal face, but the time spent in traveling from the mouth of the shaft to the place where he works, and the time taken for lunch. The English committee therefore found that on an average the English miner actually put in not much more than six hours of actual work on a normal workday.

While no accurate data are obtainable on which to base a similar computation for the United States, it seems highly probable that the average number of hours would, for the whole country, be even less than in England.

It is usually assumed that a shorter work day will produce greater regularity of employment and that much of this loss of time due to voluntary absenteeism and preventable causes would disappear. Thus far the results in America do not confirm this belief. In Ohio, where the eight-hour day prevails, the average number of days worked in the year 1905 were 173, whereas in West Virginia, with the ten-hour day, the average number of days were 237, and in Virginia 237, and in other states from 150 to 250. In no case, even where the eight-hour day is in force, do the miners work the entire 300 days in the year.

It is perhaps true that a shorter and more rigid labor day will eliminate some of the absenteeism and induce the operators to have the breaker and other machinery running more regularly. But, considering the character of the labor and the nature of the industry, this would by no means make up for the loss of time due to the reduction. It has been estimated that in the United Kingdom the total labor hours per day, would be reduced from 6,197,359 to 5,474,328.⁵ It is almost inconceivable that the increased regularity and efficiency of the miners

⁵ See Chart II

should counterbalance this enormous loss of time. In some cases the laborers are not working at their maximum efficiency and in others they have already reached their optimum, and but little increase is possible. The increased efficiency due to shortened hours is more manifest where the reduction is from twelve to nine than where the reduction is from nine to eight hours.

EFFECT ON MECHANICAL EQUIPMENT.

The enlargement of the production per man per hour is much more likely to result from the improvement in the mechanical equipment of the mine. Improved and larger breakers, hoists, coal conveyers, an increase in the number of shafts, and better methods for handling the coal after it leaves the mine, promise much larger increase in output of coal in the future. This movement will probably be hastened by an eight-hour day—but it is a movement which is going on about as rapidly in the mines where the ten-hour day prevails as in the eight-hour mines, and it cannot therefore be legitimately called a result of an eight-hour law.

ECONOMIC EFFECTS OF THE EIGHT-HOUR DAY.

The most important economic question involved is whether or not such a law will result in a diminution in the output of coal. This question is answered affirmatively by nearly all mine owners and by those who oppose such legislation. Others, among whom are many leading economists, labor union leaders and investigators, maintain just as vigorously that the reduction of hours to eight, will not in the long run decrease the output per day per man. Large amounts of statistics are cited on both sides, but a careful study reveals the fact that but few accurate data are available on this specific problem.

If a shortening of the labor day causes a great reduction in the output of coal it is a most serious matter, and is of far greater importance to the country than a reduction of output in any other industry, since nearly all industries depend to a greater or less degree upon a cheap and stable supply of this commodity. The industrial prosperity of a country is no longer measured by the per capita consumption of meat and bread. Says Jevons in his treatise on the Coal Question: "Our subsistence no longer depends on our production of corn. The momentous repeal of the corn laws throws us from corn to coal. It marks the epoch when coal is finally recognized as the staple produce of the country." This epoch, foreseen by Jevons for England at the time of the corn laws, has also arrived in America, and if she is to hold her own in the competition for world markets, she must see to it that her factories, smelters, and steamships are supplied with as cheap a fuel as her rivals England and Germany.

The most thorough investigation of this question thus far attempted, has been carried on by the recent Miners' Eight-Hour Day Committee in England. In a hearing before that committee, Mr. Radcliffe Ellis, the chief representative of the mine-owners' association, attempted to show that a reduction of the hours of labor in the United Kingdom from the present average of nine hours and three minutes to eight hours would mean a reduction of 31,900,000 tons per annum, or about thirteen and a half per cent. of the total output.⁶ This, he maintained, would quickly produce a crisis and ultimately the downfall of England as the industrial leader of the world.

As far as actual experiments are concerned, Austria probably furnishes the best example. After a trial of

⁶ See Chart II

four years, the statistics compiled by the Austrian Bureau of Agriculture, indicate that one hundred and seventy-five, out of the total of three hundred and two coal mines, maintained their output, seventy-eight produced less than they had before, and forty-nine fluctuated from year to year.

The Royal Mining Office of Breslau, Germany, states that the reduction of the labor day for the miners in Lower Silesia resulted in from six to twenty per cent. decrease in the output, and in only three mines was it increased. On the other hand, the secretary of the Yorkshire Coal Masters' Association states that the eight-hour day had increased the output in the Yorkshire collieries, whereas in Cumberland a three-fourths hour reduction resulted in an eleven per cent. diminution in the coal product.

The evidence therefore shows what we would naturally expect it to show, that the output is increased under certain conditions and decreased under others. It depends on the character of the men, the character of the coal bed, and the character of the management, whether one result or the other follows.

Generalizations are exceedingly dangerous and they often mean nothing, but if the meager data obtainable in the United States may be made the basis of a general conclusion, it may be formulated as follows: A reduction of the labor day in Pennsylvania and West Virginia will not result in an enormous curtailment of production, as is maintained by the operators, nor will it result in increase of output, as contended by some writers; but it will result, for a time at least, in a reduction of the quantity of coal put upon the market, and that in turn, unless a crisis sets in, will mean higher prices both to the manufacturer and the domestic consumer.

In the long run the mining industry will easily make up for the curtailment of production brought about by a short labor day. As an illustration of the possible expansion of coal production under an eight-hour day, it is only necessary to observe the extraordinary increase in the output of the mines of Illinois, just before the two-year agreement between the miners and the operators expired, on April 19, 1906. (See Chart III.) If at that time, in anticipation of a strike, the output could be increased over a million tons above the highest point reached by production during the busiest season of the year, it is reasonable to suppose that in the country as a whole, a small increase in price would in the long run bring about a more than equivalent increase in production.

In attempting to pass upon the question whether a legal, rigid eight-hour day should be introduced in spite of the probable reduction of output, it is necessary to consider both its effects upon the miners, whose motto is, "Whether you work by the piece or the day, reducing the hours increases the pay", and also the effect upon the industries dependent upon the coal supply. So far as the miners are concerned, there seems to be almost unanimity of opinion that a regular eight-hour day would be advantageous. There is nothing, says Charles Booth, that so tends to demoralize the character of a body of workmen as irregularity of employment.

The educational movement, the Americanization of the aliens, the development of thrift and manhood, are all fostered by short regular employment. It will give the miner what Ernest Abbé said every man was entitled to, namely: "Eight hours for work, eight hours for sleep, and eight hours to be a man." But the laborers are not the only ones to be considered. The great outside public has become a third partner in the coal industry. Its in-

terests must also be considered. The public is vitally interested in the elimination of everything that produces disturbances in the regular supply of coal. The Bureau of Labor reports that in the twenty years, 1881-1900, 13,116, or eleven and two tenths per cent, of all the strikes in the United States were for a shorter labor day, and in 37,113, or thirty-one and six-tenths per cent. of all the strikes, a shorter labor day was one of the causes. During the last six years there has been scarcely a single great strike, in which this question has not been important. If by legislation it is possible to eliminate this important cause of labor disputes in the coal industry it might be desirable, even if the output were for a time reduced.

In Illinois and Ohio, two of the greatest coal-producing states, in which the miners themselves have secured an eight-hour day, the average number of days worked by the coal miners in the year 1905 was only one hundred and seventy-three. In Illinois the average for 1906 was only one hundred and seventy-two days, and for the fourteen years ending 1906 the average was one hundred and eighty-four days. In Pennsylvania, West Virginia, and Virginia, states in which the longer days prevail, where the unions have not been strong enough to win by force a shorter day, the average number of days worked each year is very much greater. In West Virginia the average for 1906 was two hundred and thirty-seven days, for 1905 two hundred and thirteen, and for the ten years ending 1906 the average was two hundred and twenty-four days.

The other states show similar returns. These figures help us to appreciate the economic waste involved in letting the contending factions fight it out. If, in the state of Illinois, the coal miners have been forced to be

idle from four to six months each year during the past fourteen years in a period of unprecedented industrial prosperity, it would seem to indicate that the systems of fighting out industrial disputes is disastrous to the worker at least. An average of from four to six months' enforced idleness on the part of every coal miner in the state tells its own story of misery and loss.

THE EIGHT-HOUR DAY IN ITS RELATION TO THE HEALTH
OF THE MINERS.

The ruling of the Supreme Court in the Utah case lays particular stress on the necessity of such legislation in order to protect the health of the miners. The question naturally arises whether a shorter labor day does materially benefit the health of the miners and whether the miner's health is such that he needs protection. Very few reliable data can be found, but if we can accept the results of the English statistics relating to the health of coal miners, we find that mining is there apparently a dangerous but not unhealthy profession.

Taking as a standard the number of males between the ages of twenty-five and sixty-five years, among whom one thousand deaths occurred in 1900-2, the English Superintendent of Statistics found nine hundred and twenty-five deaths among occupied males, and among the same number of coal miners actually following their employments, only eight hundred and forty-six deaths, whereas the number of deaths among an equal number of tin miners is far in excess of the average for the occupied males in the country.

There are said to be no special diseases that particularly effect coal miners. In recent years, however, the coal miners of Belgium, Germany, and Australia have suffered in large numbers from an intestinal disease caused

by a parasite (*Anchylostomiasis*). When once introduced it spread with great rapidity, largely as a result of lack of cleanliness on the part of the miners and lack of sanitary appliances in the mines.

The disease is preventable in its nature, and has not as yet spread to England or America. While the occupation of the coal miner does not appear to be especially unhealthy either in England or America, it does not follow that shorter hours would not be beneficial to the health of the miners. According to the scanty information obtainable from England, those counties in which the mortality was highest were also the counties having the longest hours for coal miners, whereas the lowest mortality rate is found in those mining districts in which the labor day is shorter than the average. There is not enough evidence to warrant any generalization on the subject, since none of the state mining inspectors or bureaus of labor have given the subject much attention.

ACCIDENTS IN COAL MINES AND THE LABOR DAY.

On the other hand, considerable attention has recently been given to the causes and prevention of accidents in coal mines. The terrible catastrophes both in the United States and in foreign countries have aroused public sentiment everywhere, and in response to this demand, several states are now making statistics of accidents, and investigating their causes and methods of prevention. The advocates of the eight-hour day in coal mines maintain that accidents are often due to the exhaustion and carelessness brought about by long hours. Furthermore, it is claimed that a shorter labor day would promote education, which in turn would tend to lessen the possibility of accidents, since many of them are due to ignorance, rather than to carelessness.

The opponents of such a measure claim, on the other hand, that an eight-hour day will cause excessive haste and carelessness, since nearly all miners are paid by the ton instead of by the day, and in order to do the same amount of work in eight hours as they now do in ten, miners will give less attention to the timbering, the roof, etc., thus increasing the probability of accident. If a shorter labor day would really result in greatly increased speed, this conclusion would probably be sound, but in many cases it is asserted that the miner will not work any faster, but will simply utilize the time which is now wasted and thus maintain the output per day. If accidents were particularly numerous during the last hours of the day, as we would expect in case they are due to fatigue and carelessness, a shorter day would tend to diminish their number, but statistics seem to show that the majority of all mine accidents occur in the earlier hours rather than in the latter part of the day. They are more frequent where foreigners are employed than among native-born miners, and, according to the data gathered by the inspectors of West Virginia, vary inversely with the length of time the workmen have been engaged in mining.

The long labor day does not, therefore, appear to be a direct cause of accident. There may be a slight indirect relation, but this also is very uncertain. The long labor day makes it more profitable to employ cheap foreign labor than under an eight hour day. These foreigners, ignorant of the language of the bosses and the managers, can with difficulty be taught the most elemental principles of safe mining. In some of the German mines this danger is deemed so great, that foreigners who do not understand the German language are refused permission to work underground. A compulsory eight hour day

would make it unprofitable to employ the cheapest grade of labor now utilized, and native-born miners would, it is believed, take the place of the immigrants.

THE MEANING OF AN EIGHT HOUR DAY.

An eight hour day in coal mining has no definitely established meaning such as it has in the factory. The men must descend the shaft a few at a time and, where the number of workmen is large, this operation takes from fifteen minutes to an hour. In England the average is half an hour, whereas in America the average is perhaps lower because many of the mines are very near the surface. The eight-hour day as interpreted by the English Committee means a 'bank to bank' day, which means a period of eight hours' duration under ground for each individual miner. It may be calculated from the time the first cage in the morning leaves the mouth of the mine to the time when the first cage in the evening carrying miners reaches the surface, or it may be calculated from the time the last cage leaves the mouth of the shaft to the last cage in the evening. Another way to measure the eight hour day is to calculate it from the descent of the first man to the ascent of the last man, thus confining all the operations of the colliery to certain specified hours. This method would make the average time of all miners underground, from eight and a quarter to eight and a half hours.

Another method of interpreting the term "eight hour day" is, that it means eight hours for raising coal and that the men shall be raised or lowered before and after this period of time. This is the method used in many of the mines in Germany. According to the regulations of the Royal Coal Mines, it is counted "from the termination of the lowering of the men in the cages to the beginning

of the raising of the men". In the Central States where the so-called eight hour day now exists it is in reality an eight and one-half hour labor day. The miner, in most of the bituminous mines, has to be in his working place and not, as in Germany, at the shaft of the mine at both the beginning and the end of the eight hours, which means that he has to be hoisted and lowered on his own time and furthermore has to travel to and from the place of work from the base of the shaft, which in some mines is a distance of nearly four miles. As the shaft is deepened and as the workings progress, the miners' labor day will thus gradually become longer, until another limit is established, usually as a result of a strike or a labor struggle. This condition prevails more or less generally in all the coal mining states east of the Mississippi, and that means that the labor day agreed upon in 1897 will in time grow longer and longer, and thus become a cause of future labor disputes.

Legislation is therefore not only needed in Pennsylvania, West Virginia, and the South, where the long day prevails, but in the very states in which the eight hour day is said to prevail, in order to establish a uniform and unchangeable normal bank to bank day, so as to fix by law the unit of measurement of labor just as at present weights and measures are established. This being fixed there would still be ample scope for collective bargaining between the miners and the operators concerning the wages or rate per ton. Such labor legislation could be introduced most advantageously in a time of industrial depression when the demand for coal is declining. At such times there will not be so much opposition to it on the part of the operators, nor will it result in a great increase in the price of coal. In many states the machinery for carrying out such a law is already in existence, for

the duties of the present mining inspectors could easily be enlarged.

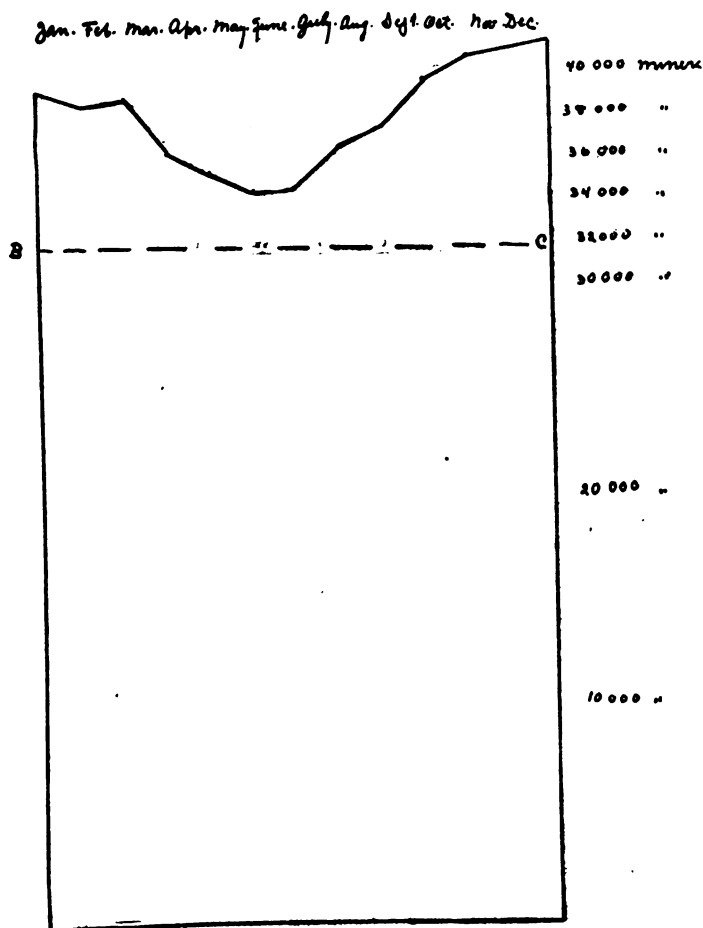
A RIGID OR ELASTIC EIGHT HOUR DAY.

It is important to consider whether such a law should be absolutely rigid and uniform or whether temporary or permanent exceptions should be allowed, by giving some official in authority, power to issue permits to operate longer than eight hours per day. Permanent exemptions might be granted in those cases where mines would have to be shut down, were the law rigidly enforced. Temporary exemptions might be granted for a month or two in times of emergency when the demand for coal is excessively great and the supply inadequate. In France where this system has been tried the temporary exemptions have aroused bitter criticisms, whereas no complaints have been heard with regard to the permits for the poorer mines. It is a question whether such an elastic system could be carried out in the United States. Where a suitable scheme of enforcement could be devised, it would seem exceedingly desirable, if exemptions could be granted to those mines whose profits are so small, that they could not continue in operation under an eight hour system. This, however, is a question of administration and expediency rather than one of policy. In any case, what is needed first of all, is investigation. To this end there should be more coöperation between the state and national investigating agencies. To obtain valuable results some uniformity of terms and their meanings should be agreed upon, and special attention given to the actual conditions in the coal mines of each state. Such investigation should precede legislation so that the law-makers may know exactly what changes such a law will bring about, how many laborers and how many mines will be

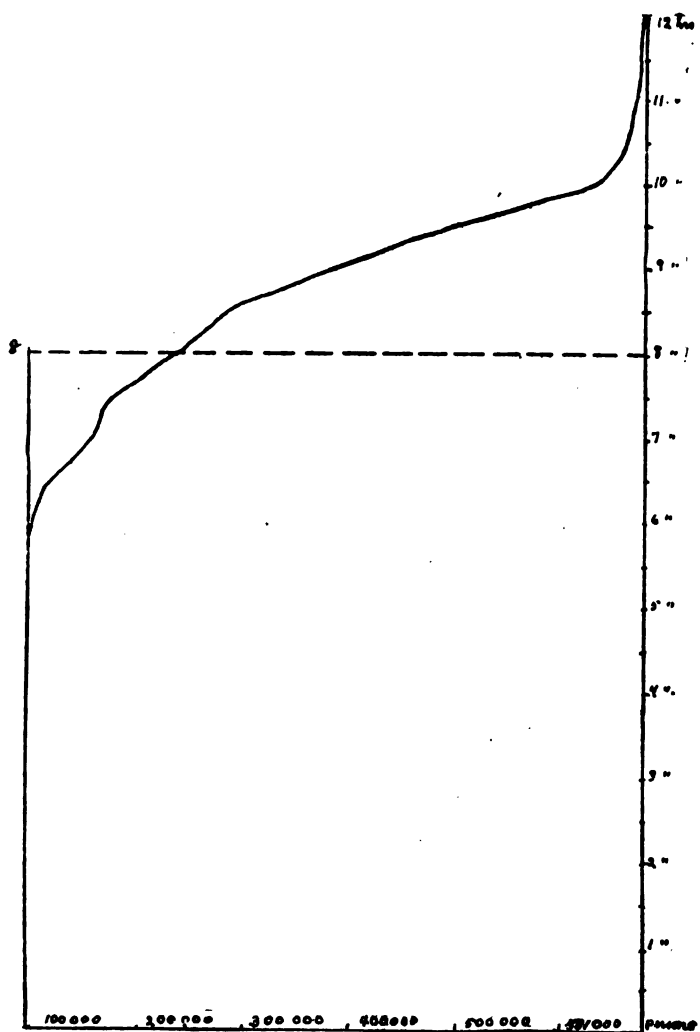
affected, and what the probable diminution of output will be.

The shorter labor day is bound to come. If it is not introduced by legislation, it will come as a result of industrial war and at an enormous cost to the country at large. The economists and writers on this subject seem to be divided into two great camps. One group, like Professor Ashley, the representative of industrial imperialism, believes that brute force will in the end have to settle all these questions, that it is best to let the laborers and the employers fight it out if such disputes are to be permanently settled. They believe that legislation usually interferes with the natural trend of events without really accomplishing anything. Says Professor Ashley in his book on the Adjustment of Wages, "For it has to be clearly understood that the ultimate arbiter in the industrial world as in the world of international politics is *force*. The determining decisions can commonly only be arrived at by a trial of strength."

The other group seems to believe that we have reached a stage, where the state can put an end to some of these industrial combats, by making laws which will diminish the uncertainty concerning mutual rights. Legislation cannot of course do everything. Legislation can only be successful where it is backed by a party or public sentiment strong enough to enforce the law. Where there are no miners' unions, and where the foreign elements predominate in the coal mines, it is doubtful whether an eight hour law would be effective. But wherever the miners have aggressive organizations, they could secure the enforcement of an eight-hour law, even though they are not able to win an eight-hour day by force.

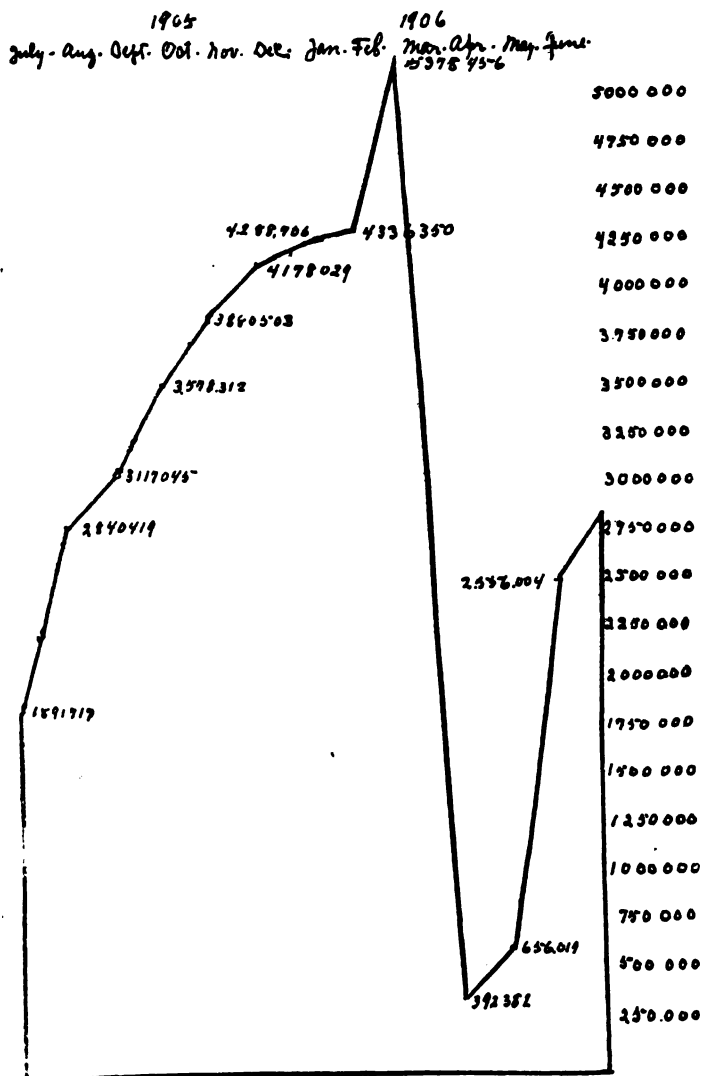


I. Number of miners employed each month in Ohio in 1905.
 Reproduced from the Appendix of the Report of the Miners' Eight Hour
 Day Commission of England.

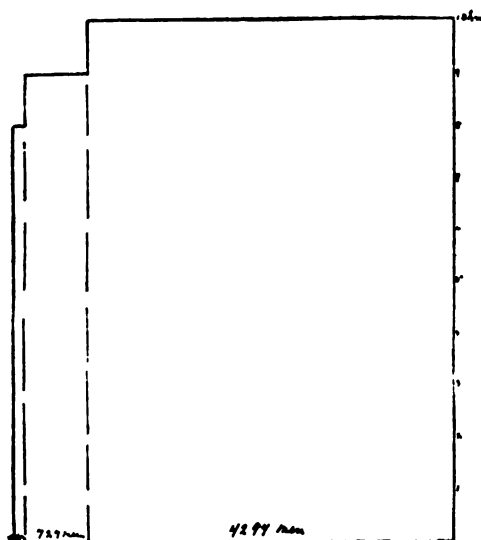


II. The labor day in the coal mines of England.

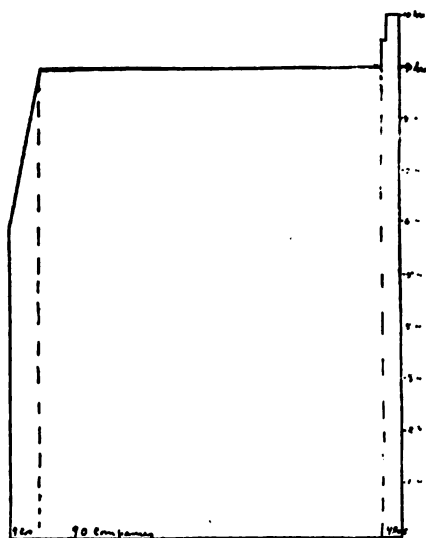
The part above the broken line shows the time which would be lost by the introduction of an eight hour day. From Report of Miners' Eight Hour Day Commission.



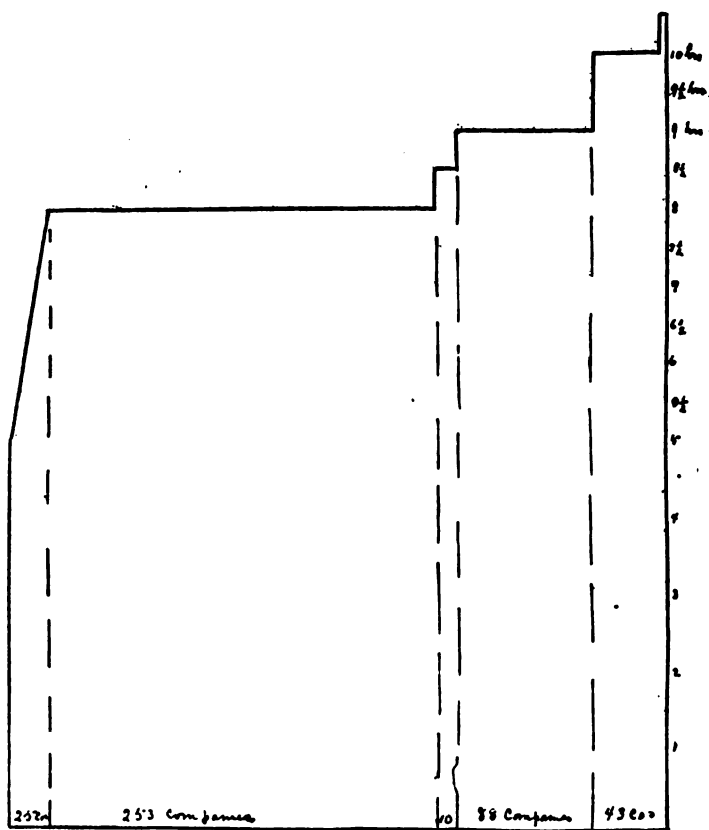
Output of coal in Illinois for each month July 1905 to July 1906



IV. Labor day in the coal mines of Virginia, 1906



V. Anthracite coal companies in Pennsylvania in 1905 with labor day.



Total day by companies in bituminous mines of Pennsylvania 1903

WORKINGMAN'S INSURANCE IN ILLINOIS.

CHARLES R. HENDERSON.

I.

ORIGIN OF THE MOVEMENT.

When President Roosevelt was Governor of New York in 1899, an effort was made in the New York legislature to introduce a compensation law, such as had been passed in England in 1897. Governor Roosevelt was eager to have it passed, but the representatives of the trade unions were instructed to work for a more stringent liability law, and the movement was retarded, temporarily defeated.

In the year 1902, Senator David J. Lewis, a lawyer, introduced into the legislature of Maryland a bill intended to encourage or virtually compel employers, in certain dangerous occupations, to provide insurance for their employees. There was in the law a drastic provision extending the scope of liability, and then the employer was permitted to avoid this liability by paying given sums to the State Insurance Commissioner for the creation of a fund, out of which a death indemnity of a thousand dollars should be paid. The law was passed, and a number of death benefits were paid out by the Insurance Commissioner. It was declared unconstitutional by an inferior court, on the ground that the law gave judicial powers to an administrative officer. No case has been carried up to the Court of Appeals, and the final test has not been applied. The author of the bill thinks that the indifference of employers to the law

was due to the fact that the number of cases attributable to negligence is so small that freedom from liability, under that clause, is not sufficient motive to induce them to go to the trouble to insure their employees.¹

This experiment seems to indicate that we cannot make progress by indirection. The legal principle, underlying the present liability law, is that of damage due by the employer to an employee injured in consequence of culpable negligence; while insurance is based on a broad social policy, in which personal culpability is hardly considered. Oil and water do not mix.

On June 5, 1903, the legislature of Massachusetts instructed the governor to appoint a committee to report on laws on the relations between employers and employees. On Jan. 13, 1904, they reported a bill, practically the same as the British Compensation Act of 1897, amended 1900. This bill was discussed and defeated, on the ground that such a law would place a burden on the manufacturers of Massachusetts, which would not be borne by these in states not having such a law, and would cripple them in competition. Legal criticisms have exposed several other objections.²

The German exhibits of the German social policy at the Expositions of 1893, in Chicago, and of 1904, in St. Louis, contributed greatly to public interest and intelligence. The exhibits of the United States showed in pitiful contrast, and awakened shame and resolve in many minds.

II.

THE ACTS OF THE LEGISLATURE OF ILLINOIS.

The immediate occasion for the introduction of the subject in the legislature of Illinois was the defeat of the

¹ See *American Journal of Sociology*, Sept., 1907, p. 196.

² See Article of Professor E. Freund, *Green Bag*, 1907.

effort of trade unions to make the liability law more drastic by statute, since Illinois has the Old English Common law to regulate employers' liability for negligence. This defeat occurred near the end of the session, but the friends of the movement succeeded in having passed (May 2, 1905, in the House, May 4, in the Senate), a joint resolution which reads as follows:

"Whereas, The limited time at the disposal of the present session of the General Assembly is insufficient to take up, much less carefully and fully consider, the important subject of industrial insurance including pensions for aged workers, protective measures in the interest of the workingmen, which in other countries have proved of great value and benefit; and,

Whereas, Even in the most favored countries the margin between work and want is an exceedingly narrow one; besides there can be no apprehensions more keen or pitiless than the constant clinging dread shared equally by all wealth producers that misfortune in the form of sickness, the liability to become incapacitated through accident or by time's inevitable advance accompanied by waning strength, there will be lacking the means necessary for ordinary maintenance. This most melancholy fact, of which all are conscious, poisons the present and fills the future with fears. The so-called civilized industrialism of our day can be subject to no stronger criticism than the charge, fortified by universal experience, that the men and women whose productive energy have contributed so much to our wealth, progress and development, leading simple, unexpensive lives, become in their declining years powerless, principally because they are penniless; and,

Whereas, It ought to be the duty of the law-making power of the state to prevent, so far as legislative aid and encouragement can modify, this deplorable state of affairs; therefore, be it

RESOLVED, By the House of Representatives, the Senate concurring herein, That the Governor is hereby authorized and requested to appoint a commission consisting

of five representative men who shall serve without remuneration and whose duties shall be to thoroughly investigate and report to the Governor the draft of a bill providing a plan for industrial insurance and workingmen's old age pension for consideration and action by the members of the Forty-fifth General Assembly."

In accordance with this instruction, Governor Deneen appointed a commission: Charles H. Hulburd, a business manager, president; Adolph E. Adelloff, a representative of trade unions; David Kinley, University of Illinois; Harrison F. Jones, a lawyer and administrator of a railroad insurance scheme; and Charles R. Henderson, secretary. The legal advisers of the commission were Mr. C. H. Hamill and Professor E. Freund, whose aid was very much appreciated.

III.

REPORT OF THE COMMISSION.

By quoting a few paragraphs from the report of this commission we can best review the argument presented:

"The duty of the commission is clearly and comprehensively stated in the resolution of the General Assembly and the necessity for its work is indicated in the preamble. Under modern conditions of industry, as compared with those in the days of our ancestors, the causes of injury and disease are multiplied by the use of rapid, steam-driven machinery, by congestion in crowded shops of towns and cities, and by the increased strain of life; at the same time the operatives have no longer ownership and control of the instruments of production, no voice in the management of the process, no vote in shaping the physical conditions under which they must toil, and no share in the profits of the business. The vast majority of industrial laborers live upon wages and are under the direction of managers on whom they are economically dependent.

"Under these conditions some measure of legal con-

trol, independent of both employers and employees, is recognized to be necessary in all civilized nations. The wage-worker produces for the common benefit, and when he is rendered incapable of earning by injuries caused by his employment he ought not to bear alone, and in the hour of his deepest need, the full burden of the loss. All the great nations have accepted the duty of social insurance except our own country; and it is not to be thought that we shall long remain, morally, in the rear.

"The commission was specifically and distinctly required by law to study the entire question in all its aspects, and to offer the draft of a bill embodying their conclusions in form for legislation. It should be noticed that they were required to offer a bill embodying the *principle of insurance* in some form: 'Whose duties shall be to thoroughly investigate and report to the Governor the draft of a bill providing a plan for industrial insurance and workingmen's old age pensions for consideration and action by the members of the Forty-fifth General Assembly.'

"To meet the needs of insurance in case of disability or death of workingmen several legal systems have been devised in civilized and progressive nations: (a) The method of making the employer liable for injuries to workmen so far as they are due to negligence or fault of the employer. This is the present law of Illinois and was formerly the law of European countries. (b) The method of requiring the employer to pay a measured compensation to workmen injured, or to the dependents of workmen killed by occupational accidents, whether the employer is negligent or not. This is the British law, and a bill to the same effect was introduced and defeated in Massachusetts, in 1904. (c) The method of encouraging or requiring employers to insure all workmen in some substantial company or association. This is substantially the French law of 1898, recently much extended in scope. (d) The method of compulsory insurance, the only complete and adequate system, as found in Germany and Austria. There are various intermediary types, but all tend toward compulsory insurance of some kind, since this alone is complete.

"The present law in Illinois is the ancient English common law interpreted by court decisions. The essential principle of this law is that an employer is bound to take reasonable care to prevent the injury of persons employed, and that an injured workman may recover damages for loss of income due to the negligence of the employer. The law recognizes an obligation of the employer to provide indemnity, but in practice this protection is utterly unsatisfactory. The law in its present state does not define the obligation nor measure its extent. The decisions of juries are so utterly inconsistent and capricious that they seem to have no uniform and equitable basis. Indemnity for loss of earning power should be based on the extent of that loss, but there is no definite legal tariff of rates for the guidance of courts; and this uncertainty makes it impossible for the business world to make regular provisions for the inevitable expense. But even if the law were explicit and clear in its definition of obligation, fatal objections remain. The workman must prove negligence, and this is extremely difficult. This state of the law, taken in connection with the crowded condition of the court dockets, provokes litigation and increases the proverbial delay of justice. The state is put to enormous cost on this account; the wounded workman or his bereaved family must wait for long years, meantime without means of support, until a decision is reached. Then it may be carried up to a higher court and reversed. If, by some chance, the workman or his family is awarded indemnity, a large part must be taken for legal expenses.

"Employers, on their side, are annoyed by the working of the law. They are compelled, in self-defense and to avoid ruinous awards of juries, to resist every case or to pay heavy premiums to liability insurance companies to carry a part of their risk. These premiums and expenses constitute an enormous addition to the cost of production of commodities, for which consumers have to pay, and cripple the nation in competition with other nations in the markets of the world. Even after paying the cost many of the workmen who are injured and have no legal re-

dress must be supported by public and private charity.

"The most serious objection to the law in Illinois and other states is that it affords at best protection in only a small number of cases. With all the partiality of juries for plaintiff, no lawyer can hope to win on the plea of negligence of the employer in more than a small percentage of cases, estimated by some at 10 to 15 per cent. of all accidents. Usually the accident is simply an inevitable consequence of the business and the ratio of accidents varies with the nature of the business, some trades being much more hazardous than others.

"It is obvious that, no matter how drastic and vigorous the liability law may be made by statute, it never can afford such protection as modern workingmen require. An employee who is disabled for life by an accident needs an insurance fund for his support, and if he is killed his family need help, whether the employer is negligent or not. No law which gives relief in only a small minority of cases can meet the situation. It is not prudent to educate masses of men to regard the law as a mockery and delusion.

"Furthermore, the only effect of severe legislation directed against employers is to cause them to combine to resist it, to organize to insure themselves against the higher degree of risk, and to intensify hostility and friction between men who are associated in enterprise. There is already more antagonism and bitterness than is wholesome for our national life; and no law ought to be framed which history proves must have the inevitable tendency to deepen, widen, and inflame social distrust and opposition of interests.

"It is sometimes argued that severe liability laws will make the employer more careful to prevent accidents; but experience in older countries shows that there is a more direct, certain, efficacious, and economical method.

"The present law is rapidly producing antagonism to casualty insurance companies because it perverts their social purpose by making them a barrier between employer and employee. Under the bill we propose, the casualty companies, as in England and France, would be

a natural mediator and friendly helper of both sides in interest, and thus their legitimate business would be increased without awakening distrust and hatred as at present is true. It is chiefly a defect in our law which has given occasion for the development of a kind of insurance which is satisfactory neither to employer nor workman; for the law actually creates an artificial risk of unknown extent against which men are constrained to insure at extravagant rates.

"Considerations of *timeliness* have induced us, though with *reluctance*, to offer a law which will not fully meet the requirements of the future, but we think it marks a definite stage of progress and will help to hasten the day of universal and complete insurance. Through actual trial and experiment its limitations will be discovered, its defects corrected, its provisions extended, and its administration improved.

"The law herewith offered conforms in its fundamental outlines and principles to the requirements of the joint resolution of the General Assembly of 1905; and if it is adopted and put in practice by employers it will afford to workmen vastly greater security than they can at present enjoy and will remove many of the anxieties of employers. It would afford a method of insuring all workmen in all hazardous occupations where it is used. It would give freedom to employers to avail themselves of any practical and reliable insurance agency, whether casualty company, mutual insurance association, or corporation fund. It would leave trade unions as free as they are now to increase their own funds and follow their own methods; because the law aims only at a minimum insurance at lowest cost, while workingmen may still increase their benefits in other ways and will have more money to do so. The law will guarantee to workmen that the employers pay a reasonable part of the premiums in consideration of corresponding relief and advantage to themselves. It would protect employers from being heavily fined and threatened with bankruptcy through excessive awards. It would tend to prevent accidents by making every employer and every employee an interested inspector.

"We have thought it wise to recommend related and supplementary legislation, as laws for improved protective methods and a scientific investigation of occupational diseases. As these points will be covered by other bills to be offered at this session, we shall go no further than to indicate their close relation with industrial insurance. But we wish to remind the Legislature that insurance organization tends to make factory inspection more thorough, effective, and economical; because under a system of insurance every employer and every employee is directly and financially interested in lowering the rate of premiums or increasing the amount of the benefits, and therefore is watchful to prevent both accidents and sickness by all possible means.

"Undoubtedly the time is not distant when our industrial states must take up the problem of legislation upon sickness insurance. To provide a scientific basis for such legislation we recommend the appointment of a competent commission having the power and the means to make a thorough study of the kinds, causes, and extent of diseases among workpeople, and the most modern methods of protection, prevention and insurance.

"The commission does not recommend any legal measures in relation to *old age pensions, invalidism, unemployment* and sickness insurance. It seems that the most natural point of approach to this whole range of much-needed protection is accident insurance.

"Already some of the greater corporations are organizing old age pension schemes, and these seem likely to multiply. Later they may be better for a measure of legal regulation or stimulus. At present it does not seem wise to lay before the Legislature drafts of laws for which the public is not quite ready, for which there has not been adequate time for discussion and for maturing plans.

"By a natural development accident insurance will lead on to sickness insurance and old age pensions; for it will soon be discovered that accidents are not the only important cause of distress in the families of workingmen; and the benefits which will be derived from accident insurance

will encourage the people to demand an extension of the principle to other fields.

"We recommend to the General Assembly :

"(1) The consideration of the essential features of the bill herewith presented, with such modifications as may be made after full discussion of all interests involved and represented.

"(2) A law almost identical with the law of 1905 (Acts, p. 293) on Mutual Casualty Insurance Companies, with such changes as will adapt it to the need of a mutual insurance association in which the interests of the workman are more directly considered and in the management of which they are represented in the relative measure of their contributions.

"We recommend the amendment of the law of 1905, entitled, 'An Act to provide for the organization and management of mutual insurance corporations for the purpose of furnishing insurance and indemnity against loss to members in consequence of accidents or casualties to any employee, person or persons occurring in or connected with the business of members thereof; and to control such corporations of this state and other states doing business in this state and providing and fixing the punishment for violation of the provisions thereof', by inserting as a second sentence in section 17, the following:

" 'When insurance companies are organized for the insurance of both employers and employees, or for the insurance of employees only, then the directors shall be composed of employers and employees respectively, in equal numbers.' "

THE BILL.

Owing to the fact that the commission could not thoroughly revise its bill before the day set for introduction, the form printed in the report was afterward modified and so introduced into the Legislature. I shall attempt to give only its essential principles.

Section 1 contains the most vital element :

"It shall be lawful for any employer to make a contract in writing with any employee whereby the parties may agree that the employee shall become insured against accident occurring in the course of employment which results in personal injury or death, in accordance with the provisions of this Act, and that in consideration of such insurance the employer shall be relieved from the consequences of acts or omissions by reason of which he would without such contract become liable toward such employee or toward the legal representative, widow, widower, or next of kin, of such employee."

Section 2 provides for the method of administration.

Section 3 defines the nature of the insured risk.

Section 4 describes the beneficiaries.

Section 5 defines the benefits in case of death, and temporary or permanent disability.

Section 6 requires the employer, in consideration of his exemption from other liability, to pay at least 50 per cent. of the premiums.

Section 7 provides for notification of injury.

Section 8 permits deduction of premiums of workmen from pay roll.

Section 9 provides for custody of funds.

Section 10 provides remedies for non-payment of premiums.

Section 11 provides for collective policies.

Section 12 covers the case of employees leaving service.

Section 13 provides for settlement of disputes by arbitration.

Section 14 protects the benefits from seizure for debt.

Section 15 provides that the employer remains liable under the common law if he *neglects requirements* for preventing injuries.

Section 16 requires record of contracts and policies with the Insurance Superintendent.

Section 17 requires quarterly reports of settlements and payments.

Section 18 provides for official forms of contracts and policies.

Section 19 forbids an employer to make the signing of this contract a condition of employment. This was added after conference with trade union men. In any case it would be law.

IV.

THE RECEPTION OF THE REPORT.

The *immediate* fate of the bill had been anticipated by the commission. The members of the commission realized from the beginning that their functions were chiefly educational and that neither employers nor employees were prepared for immediate action.

Few members of the Legislature had given any study to the matter. The Senate committee which was charged with the bill gave the commission a patient and intelligent hearing. The Governor did all that was in his power and commended the report for favorable consideration.

The lobby of manufacturers and railroads was there to defeat another bill for protective legislation and soon learned that our bill was for the present harmless; so that apparently they gave it no attention. Manufacturers who were consulted regarded it with favor.

The trade union representatives openly opposed the bill in the committee hearings and elsewhere; they were sent there with a mandate to kill the proposed law and to urge action for protective legislation and a more drastic liability law. It is manifest that unless their attitude is changed we cannot secure such legislation; for lawmakers will not urge measures against their protest.

It is therefore important for us to put ourselves in their place and try to understand their reasoning. From

repeated conversation, speeches and public articles, we may conclude that their antagonism to insurance schemes is due to several causes :

(1) It became clear that the trade unions have not had time to consider the methods of insurance ; and they have from some source acquired some distorted notions of what it means. As one of the ablest men among them, himself a zealous and convinced friend of the movement, declared, "We did not begin soon enough". It is encouraging to know that many of these men are giving the subject serious thought ; in due time they will become advocates of some form of insurance legislation.

(2) The workingmen have been trained by habit to look to the liability law for their legal rights in cases of injury. The law itself and the procedure of courts have drilled them to a combative attitude ; the suit is for exemplary damages, retribution for personal wrong, and what is sought is punishment of a person guilty of an offense. As experience under the new Compensation law in Great Britain shows, this hunger for revenge is not easily removed, after generations of training under it.

(3) Workingmen have been taught by the common law and procedure under it to look and fight for large speculative awards from juries and courts. They hear occasionally of awards of \$5,000 to \$30,000, and the natural thirst of the gambler is unconsciously excited and made feverish in them. They do not think so much of the weary years of waiting ; of frequent defeat and disappointment at the end ; of the lion's share which goes to the lawyers as contingent fees. They have not fully comprehended the fact that only a small part of the accidents in occupations is really due to negligence of the employer. But many of the men have learned this lesson and they will teach the others in due time. The workman cannot quite consent to give up this fascinating pursuit

of a lottery chance, with rare grand prizes, for the sober and measured methods of insurance.

(4) Another cause of trade union antagonism to insurance lay in the feeling that our particular measure comes short of the best laws of Europe; that the premiums there are all paid by the employers, while we, because we despaired of success if we asked more, required them to pay only half of the premiums. It is acknowledged that there is justice in this claim.

It is possible that some other form of law may be found which will meet this difficulty. (For example, might not the benefits be reduced to an amount which would be covered by *half* the proposed premiums, and *all* paid by the employers, on condition that they are released from further liabilities? Then the workmen would be free to increase and even double the benefits if they chose by accepting the proposed contract, or by insuring themselves in some other way. Whatever is done at first will probably be a compromise measure which will educate employees and employers for something better.) Even as the bill stands it is better than any of the great railroad schemes, for in them litigation is avoided and the men pay almost *all* the cost of insurance.

(5) We did not learn that the trade unions feared that our bill would weaken attachment to the unions. It is possible that they were to some extent affected by this fear, which could easily be shown to be groundless.

(6) Perhaps the most decisive factor in determining the trade unions to antagonize our bill was their concentrated effort to secure protective laws.

We did, indeed, make common cause with them; we offered evidence to prove that accident insurance laws, by requiring benefits without regard to proof of negligence in all cases of injury, would bring pressure to bear on

employers to use devices for reducing the number and severity of accidents.

But where a body of men are intent on one single point they are apt to regard any other proposition as a kind of rival.

PROBABLE INFLUENCE OF THE MOVEMENT IN ILLINOIS
TO SECURE AN INDUSTRIAL INSURANCE LAW.

Two of the specific recommendations of the commission were adopted by the Legislature: (1) the requirement that manufacturers should report all serious accidental injuries to the Bureau of Labor Statistics at the capital; (2) the creation of a new commission to study the questions relating to industrial diseases.

The first of these measures will help to give us arguments and statistical data for an accident insurance law; the second will reveal the necessity for sickness and invalidism insurance. Both will keep the subject before the public mind.

The question will not down. The City Club and the Industrial Club of Chicago have already taken up the problem for serious consideration. Lawyers have begun to seek for a constitutional way out. Great newspapers are publishing stories of accidents, tragic in their consequences, which call for insurance protection. The charitable societies are opening their records to the public and revealing the causes of pauperism in accidents, diseases, invalidism, and old age. The Board of Cook County have instructed their agents to investigate the cases of dependent persons and families when their need of public relief was due to disease or accident.

The charitable societies are alive to the significance of the question and they are studying their records to discover how far the occupation ought to carry the burden of incapacity for earning a living.

In the preamble of both joint resolutions (for the insurance commission and for the industrial diseases commission) the Illinois Assembly fully committed itself to the modern doctrine of social legislation. There is room for doubt as to their appreciation of the meaning of their preamble; for it is said by knowing ones that they passed the resolutions without much consideration and chiefly to get rid of the importunities of the labor people and "reformers".

Experience with politicians teaches us that many of them have short memories, especially while public opinion is not yet quite an avalanche. But the record stands and it contains a statement of political principle which is in contradiction to the old economic views of individualists and to the common law doctrine of employer's liability; it is frankly and clearly an assertion of the duty of the state to care for the welfare of the working people.

Without committing ourselves as to the literary form of expression we may greet the substance of this assertion with satisfaction:

"It ought to be the duty of the law-abiding power of the state to prevent, so far as legislation and encouragement can modify, this deplorable state of affairs"; that is, the conditions under which working people, sober, industrious and frugal, after faithful service in multiplying the comforts of civilization, are denied a share in enjoyment by reason of accidents, disease, and old age.

House Joint Resolution of March 12, 1907 (concurred in by the Senate, March 20), says:

"It is universally recognized as the *moral duty* of every civilized state to secure and publish information of vital importance to all citizens to promote safety and health, and to *foster and regulate insurance against loss of income by accident and disease.*"

THE RELATION OF THE UNITED STATES TREASURY TO THE MONEY MARKET

DAVID KINLEY.

The federal treasury touches the money market in two ways. In its fiscal operations under the independent treasury law it withdraws from circulation the money received in payment of taxes and dues of all kinds and disburses these receipts in making its payments at times and under conditions which have a reference only to its fiscal operations, and none whatever to the currency needs of the business community. In its simplest form the independent treasury is the recipient of a constant stream of money of varying dimensions, like a reservoir as it were, out of which the stream is permitted to flow again only at intervals, and in a volume that has no relation to the volume of the inflow.

Through modifications of the law, however, made from time to time in the past sixty years, the independent treasury has been used by various secretaries of the treasury, either of their own initiative or under pressure from the banking interests of the country, as a means of controlling the currency supply; that is, of giving to our currency supply the much desired and much debated quality known as "elasticity". It is this latter function which has become of paramount importance in recent years, and to which I shall invite attention in a moment.

In its operation as a fiscal institution, the independent treasury has often been described and is familiar to all of

you. The principal objection to it, as has been already intimated, is that it withdraws money from circulation and disburses it again without any reference to the demands of the business community. Consequently, it has, at times, locked up currency when more was needed by the people, and has disbursed it when less was needed. At times, indeed, we have been more fortunate, and treasury intake and disbursement have coincided with the increased need and lesser demand, respectively. So far as the legal operation of the fiscal department of the government is concerned, however, such an occurrence is a happy accident.

The evil thus caused was seen early in the operation of the independent treasury law, and measures taken to mitigate it. It is not necessary at this time to go into the details of the measures taken from time to time for this purpose. In the earlier days they included the purchase of government bonds by the treasury at high premiums, and the prepayment of interest on the government debt. Later the provision of the national banking law authorizing the deposit of the receipts by internal revenue collectors in national banks enabled the secretary of the treasury to lessen the irregularity in contraction and expansion due to revenue operations. Until within a few years these three methods were the only ones employed or regarded as legal for preventing the independent treasury from disturbing the money market. While the revenues of the government yielded little or no surplus they were sufficient. It is clear, however, that the larger the surplus the greater the disturbance that will be caused by locking it up.

Now, our revenue system is of the same happy-go-lucky kind as our fiscal machinery. We may almost say that our taxes are devised by one set of men, our expendi-

tures by another, without any connection with the former group, and that the actual amount of revenue received depends more upon the influence that can be exerted by the representatives of "proper" interests in our country than by the real needs of the government. Like certain gentlemen in romance, we get all we can and spend all we get, without asking whether what we get is a proper and reasonable amount for running the government or whether what we spend is wisely spent.

Now, it happens that in the past forty years we have had deficits only nine times, while in the other thirty-one years the annual surplus has ranged all the way from 2.3 millions of dollars in 1893 to 145 in 1902.

The larger the surplus the larger the amount of money withdrawn from circulation and the greater the necessity for getting it back. In the absence of occasion for paying government debts with it, it can be gotten back only by depositing it in the national banks. No equalization of government disbursements from month to month throughout the year can do away with the mischief caused by surplus financiering and the consequent withdrawal of a large amount of money from circulation and its arbitrary distribution among the banks. Nor can the surplus be used as hitherto, in the earlier days, for the redemption of government bonds, because this redemption would cause a diminution, or at least prevent further expansion, of the national bank currency.

In the face of these difficulties, which have been growing greater with the larger surplus revenue, the past few years have seen a change in the interpretation of the law by the secretaries of the treasury in their efforts to prevent the evils spoken of. As has been already remarked, in the early days of the independent treasury law the only means at the command of the secretary of the treasury

to mitigate the disturbance of the money market caused by locking up the government income, were the anticipation of payments of the national debt, prepayment of interest and permission to allow internal revenue to find its way into banks instead of directly into the treasury. In the past half dozen years the secretaries of the treasury have expanded their powers, and, instead of attempting, as formerly, simply to minimize the disturbance caused by the independent treasury, they have turned it into an active agency for the regulation of the currency supply of the money market. From being the direct and final lodging place for government money which it was designed to be by the constitution, the independent treasury, under the national banking act, became also, in part, the final reservoir of a current of money flowing through the national banks. Under Mr. Secretary Shaw in these latter years it was made a reservoir from which streams of money could be poured into the banks after it had reached its constitutional resting place. It is only within a few years that any secretary of the treasury has ventured to take money already in the treasury and deposit it in the banks. By so doing the secretary of the treasury has arrogated to himself the complete control of the elasticity of our currency. He has made deposits when he thought the money market was stringent or likely to be so; he has withdrawn them when he supposed the contrary condition prevailed or would prevail. In other words, a man not engaged in business has undertaken to control the ebb and flow of the means of payment. If his judgment were always sound as to the occasions for interference, it is doubtful whether it ever could be as to the extent of interference necessary or desirable. In other words, the extension of the practice of depositing government money in the banks is an attempt to do by arbitrary

or mechanical means what ought to be left to come about as the result of business operations. It is a power of too great potential danger and misuse to be left to any officer or any individual.

As we have seen recently, the practice arouses criticism and suspicion among the public and gives rise to charges of favoritism among the banks. Moreover, the feeling on the part of the banks that the government money is available if they can convince the secretary of the treasury of its need, militates against care on their part. When a stringency occurs banks are likely to rely on the government so much as to prevent their taking measures for the early restoration of the natural correctors of the disturbance. As Mr. Andrews has put it in his recent admirable article on the subject in the *Quarterly Journal of Economics*, the practice "tends to check appropriate measures of precaution and to hinder natural methods of relief".

The authority conferred upon the secretary of the treasury by law, or, to speak more correctly, the interpretation of the law by Mr. Secretary Shaw, for the administration of the independent treasury, has been used to open up still other methods of interference with the money market. Besides buying bonds, prepaying interest, permitting deposits to be made by collectors of internal revenue, and, finally, by depositing in the banks money once in the treasury, Mr. Shaw interfered further by accepting other than government bonds to secure the public deposits, an authority which was afterwards confirmed by law. The secretary has attempted to relieve the depositary banks also by informing them that they need not keep reserves against their holding of public funds, thereby releasing the reserves thus previously held to sustain their liabilities. The secretary has further

virtually paid banks for importing gold by a device which allowed them the interest on the amount imported from the time the order for the importation was placed until the time of its receipt.

We have seen the secretary of the treasury, moreover, actually try to control the existing amount of currency, and thus impart to it the elasticity it so much needs by withdrawing and disbursing large sums in anticipation of market conditions, on his own initiative, and on his own judgment. Having accepted other than government bonds to secure public deposits, he has insisted that the government bonds thus released should be made a basis for increasing the amount of national bank notes.

It is hardly necessary to comment on the dangers that such a power in the hands of one man causes for the business interests of the country. Such a species of paternalism puts prudence at a discount, stimulates the speculative spirit, endangers the public money, and vitiates respect for the authority of the law, to say nothing of the vicious evils of favoritism and prejudice to which it gives rise.

Thus we see that, in the sixty years of its existence, the independent treasury has become an institution of a very different character from what its creators intended. In 1846 it was the depository of the public monies, intended to keep them safe from the manipulation of the banks. In 1861 it established a permissible but slight connection with the banks. In 1903 we find the law interpreted so as to take money actually already in the treasury for deposit in the banks, and from then until now we see the independent treasury made an active and dominating factor in determining the volume of money in circulation, in other words, the elasticity of the currency.

In the past few months we have seen the scope of inter-

ference of the government in the money market still further extended by the issue of interest-bearing treasury notes at a time when the government revenues were not only ample for its expenditures, but showed a large surplus; and the increase of our national debt for a similar purpose.

In the face of the evils that such arbitrary interference in so many ways has caused, it is somewhat surprising to find the independent treasury defended by so able an authority as Mr. F. A. Cleveland. He insists that it is not true that the money in the vaults of the government is taken out of circulation. He emphasizes the help which the disbursement of the treasury gives to the money market at those times when they are accidentally made at opportune times. He objects to the deposit of the government funds in banks on the ground that this may increase monetary disturbances. He insists that the independent treasury increases the national money supply, that its periodic intake and output concur with the times of surplusage and need in the money market!. All that need be said with reference to these arguments is what has already been remarked, that the facts show that such a concurrence of treasury operations and money market needs is infrequent; that the system is liable to mistake and abuse, and that at its best it is arbitrary and mechanical.

The most important part of the remedy for the evils of the independent treasury as a fiscal institution is the wiping out of the surplus revenue, and the adoption of a budget which will leave on hand approximately only the necessary working balance for government expenditures. On that I need not enlarge.

The second step is that this working balance of from twenty-five to fifty millions, as it may be, shall be kept in

the banks by the government, secured by bonds and treated like any other deposits, to be checked against by the government when needed. The secretary should be required, and not merely permitted, to keep the government money in banks under proper conditions. If there is a surplus revenue he should be required to treat all the banks equally in the matter of deposits, instead of showing favoritism, as is alleged to have been done by a recent secretary. In short, the independent treasury should be abolished.

The abolition of the independent treasury would not and should not mean, however, the complete abolition of government influence in the money market. The passing of that institution is desirable because it is a bad fiscal agency, and because it opens the way to, if, indeed, it does not make necessary, unwise and illegitimate interference with the money market.

Under our system of currency, however, it is undesirable, and, indeed, impossible, for the government to withdraw entirely from participation in the regulation of currency. Great emphasis has been placed in late years upon the necessity for securing elasticity of the currency, and perhaps we have never felt the need of that element so keenly as in the past two or three months. What is called our deposit currency has the element of elasticity in a high degree. The money part of our currency, however, does not have it at all. Any proposals to secure this element, to be practicable, must have regard to the character of our monetary system.

Looking at the matter in a broad way, the interests of the banks and those of the public are, in one sense at any rate, the same. The promotion and protection of the one should therefore imply the promotion and protection of the other. Unfortunately, in banking, as in many other

lines of business, this optimistic view has not been borne out by experience. Not infrequently important banking institutions have followed their own interests at the expense of the public. We are justified, therefore, in scrutinizing closely proposals for alleged reform in our banking and fiscal procedure, if they emanate from the banking interests of the country and look to radical reconstruction of existing institutions. There is no doubt that many banking interests would be glad for their own purposes to be wholly untrammelled, either by the fiscal operations of the government, or by its supervising control. They urge the specious plea that competition, if left to do its perfect work, will give us the best banking system and the best currency; that the government when it interferes does only mischief, and that the solution of the whole currency situation should be left to the practical men of experience. The plea is specious for three reasons. The first is that competition left unrestrained is at least as likely to prove maleficent as beneficent. The second is that government interference and certain government supervision is not necessarily an evil; and the third reason is that the men of large experience engaged in practical affairs are just as likely to have their vision clouded by the dust raised by their own activity and personal interest as the disinterested student is to be led astray by his ignorance of practical details. For these reasons we can not give way too readily to the demand of banking institutions, which is growing more insistent with the passing years, that the control of our monetary situation be left entirely with the banks, and that the government withdraw its influence altogether from this field.

When we are pointed to the banking system of Canada, Scotland, or France, or even Germany or England, as models for us to follow, we must not forget that condi-

tions in each of these countries are very different from ours. We have no banknotes, properly so called. The national banknote is an indirect government issue. For nearly half a century we have been developing the policy of getting on without banknotes scientifically so called, and making all our currency directly or indirectly the creation of the government. Suggestions for reform or amendment must either propose the abandonment of this kind of paper issues and the substitution of banknotes proper, or they must take for granted the exclusion of the banknote from our system, or, in the third place, like the American Bankers' plan, they must propose a mixture of the two. We cannot abandon entirely and at once the system of bond-secured banknotes, and for two very good reasons. One is that the people will not have it, and the other is that the banks will not have it. To do so would throw a vast mass of government securities upon the market and cause a depreciation which would entail a heavy loss upon the banks. We must therefore retain our peculiar kind of note, and provide elasticity to our system either by making their issue easier and their current redemption easy, constant and necessary, or we must add to the inelastic volume now possible an issue of notes of the kind known as asset currency. For my own part, I see no good reason for abandoning our present system, if it can be shown that the desired elasticity can be secured under it. I believe that our people will still continue to insist that our paper currency shall be directly or indirectly issued by the government; that is, in popular phrase, that it shall have the credit of the government behind it, or be backed by the government.

With this view, it is my opinion that the most practicable mode of providing for elasticity is by an emergency currency secured by the banks from the government on

proper security, and with proper provisions to enforce its current redemption. If the banks are allowed to issue notes against their general assets one result will be the substitution of notes for a large proportion of their deposits. They will push to the limit any advantage that they can get by increasing the issue of such notes, and we shall be always on the verge of an inflation of bank-note currency. The times and degree of expansion and contraction required by business should be determined by the banks under the pressure of business demand, but regulated and provided for by the government. In other words, when there is an increasing demand for money in any part of the country, the banks which feel this demand should be able at once to secure additional notes by the deposit of adequate security, and these notes should be so heavily taxed that it will not pay the banks to keep them out after the pressure for the money slackens.

In times of pressure like the present, the real difficulty is that the so-called unincumbered and convertible securities of the banks cannot be sold. If they could be, there would be no difficulty in supplying currency. If a means can be provided to furnish currency on the basis of these securities, the needs of the situation would be met just as truly and as well as if the banks were allowed to issue notes without such security.

It is impossible, in the time at my disposal, to go fully into details as to how I think this should be accomplished. I should say in brief, however, that, in my judgment, it could be done by dividing the country into clearing house districts, compelling all banks of issue to be members of the clearing house of its district, making these clearing houses for this purpose agents of the government, and changing the national banking law so as to permit the issue of notes on the basis of securities approved by the

clearing house association, precisely as clearing house checks were issued in the past month or two, but subject to a heavy fixed tax, or to one graded according to the average rate of discount in the clearing house district.

If I may summarize the points that I have tried to make, and include in the summary the provisions which, in my judgment, should be made for the federal clearing house project, they would be as follows:

1. We should abolish the independent treasury as the fiscal machinery of the government.

2. We should reconstruct our budget and give up the system of surplus financiering with all its mischievous interference with business and invitation to extravagant expenditure.

3. We should require, not merely permit, the secretary of the treasury to keep the current balance of the government on deposit in such national banks as best suit the convenience of the government in making its payments. If the government deposits were reduced to current balances, the opportunity for charges of favoritism in selection of banks would fall away. Having done away with the interference of a bad fiscal system in the money market, the government should undertake, in keeping with the character of the American system of currency, to provide means for securing elasticity by dividing the country into clearing house districts, with at least one federal clearing house in a district acting as an agent of the government for the scrutiny and acceptance of securities to protect U. S. deposits and emergency issues of notes.

4. Any national bank in a clearing house district may deposit any approved securities with said clearing house and receive in return notes upon an appropriate per cent. of the value of the security.

5. These notes should be in form and appearance like the ordinary banknotes, since a distinct form of note for emergency purposes disturbs confidence.

6. These notes should be issued at a rate of discount slightly above market rate at any time, the net proceeds of the discounts to be covered into the treasury.

7. Make these notes redeemable currently in lawful money at selected centers in the clearing house district, the banks of issue, and selected centers in other clearing house districts.

8. For the retirement of these notes permit the bank that issues them to deposit gold or legal tender with the clearing house or the sub-treasury of its district, and receive back its securities, either all at once or in stated proportions, as the bank chooses.

9. Keep this deposit of gold or legal tender as a trust fund for the redemption of these notes only.

10. Repeal the provision of the present law which permits country banks to keep part of their reserve in reserve cities.

11. Repeal the provision of the present law limiting the retirement of banknotes to a certain amount per month.

The three salient points, therefore, are:

The abolition of interference by fiscal machinery.

The preservation of our present system of currency;
and

The provision under it for elasticity.

THE RELATION OF THE UNITED STATES TREASURY TO GENERAL FINANCE.

HON. LYMAN J. GAGE, EX-SECRETARY OF THE TREASURY.

The United States Treasury, in its relation to the banking and financial interests of the country, has occupied, since the creation of the national banking system, to go back no farther, an illogical, not to say an unjustifiable, position. By the National Banking Act, with its several amendments, the government became sponsor for banking institutions now numbering more than 6,500. The rights, duties, qualifications, and responsibilities attached by law to all these institutions were fixed by the government itself. Having brought these agencies into being, it virtually declared to the citizens of the land, "These are worthy agencies, and they deserve your confidence. For the faithful performance of the duties imposed upon them and in the interest of your safety, we, the government, will maintain over them a watchful and detailed supervision, disciplining those unfaithful to duty, while we will peremptorily suspend the power of any who shall prove unfit." Clothed with these high warrants and sanctions, the national banks as a whole have made successful appeal to the business world, and these institutions now, taken together, are under money obligations to the people for a sum in excess of four thousand millions of dollars.

What has been the practical attitude of the government, as expressed through its treasury and fiscal department, to the banking agencies it has thus endowed with life? It can be set forth in a single paragraph. Never has it

itself entrusted its financial interests to the safekeeping of the agencies it has held out to the people as worthy of their respect and confidence. It has, indeed, on several and divers occasions, taken moneys from the treasury hoard and, under peculiar exacting conditions, has, for various periods of time, deposited a portion of these hoards with banking institutions, but it has in no way conformed to the general method by which the banking agency is utilized by the business public. It has, in fact, persistently refused to receive from that portion of the public from which it derives its enormous revenues those instruments of credit known as checks and drafts, which constitute the real currency of commerce and trade. Separate, distinct, and aloof from the ordinary financial and industrial life by which, through its revenues and disbursements, it stands closely related, it is persistent in exacting cash in hand from its revenue contributors, while, on the other hand, it has distributed its payments in actual funds through its own special appointees.

In all these particulars it has been as if the banking agency did not exist, or if existing, as if it were unworthy of government use. The excess of its revenues, when excess there has been, was withdrawn from that public service to which through the banks it might have been applied.

This, I say, was illogical. It might indeed have lain in the mouth of the great corporations, such as railroads, the Standard Oil Company, and other enormous handlers of money values, to have said to the government: "Your ingenious so-called banking system does not commend itself to our respect and confidence. We believe neither in the people with whom we deal nor the banks you have created. Our revenues, however derived, must come to us in actual money. The device of checks and drafts, so

convenient and economical to the people in their other affairs, does not appeal to us. Having the power in our relation to do so, we dictate the conditions. Our money, when received, we will lock up, and in the natural financial intimacies of life we will stand separate, apart and independent. We justify this action on the ground that your banking system is unsafe."

Now, if it were excusable on this ground for the great corporations referred to to have taken this arbitrary position, which nobody will affirm, it were inexcusable for the government to do so, since it itself determined and decreed all the qualifications for safety and efficiency which its own creatures should possess.

Was this course of action on the part of the government necessary for just prudence as to the safety of its funds or proper economy in administration of its affairs? In answer to the first half of this question I affirm it to be the fact demonstrated by careful and thorough examination, that had the government employed the national banks in what is known as the reserve cities, depositing with them its revenues, with some just proportion to or regard for the relative capital of those various institutions, with no security from them whatever other than a first lien upon their assets respectively, there would never have been a dollar of loss to the government. If, on the other hand, the government had required, in consideration for these moneys so deposited, an interest return by the banks of say 2 per cent. per annum, the government would have realized from this source a total revenue up to the present time of something more than \$70,000,000.

As to economy of administration of the treasury funds, there would also have been an enormous saving, since the elaborate machinery of the sub-treasury and sub-treasuries need not have been employed. Nevertheless, the

creator has steadily refused to employ its own agencies, while the rest of the business world, obedient to the law of economic advantage, has employed in its multifarious affairs the useful machine of banking-credit which the government has thus rejected. To add piquancy to this contrast, it might be truthfully said that were the large financial corporations above referred to, to abandon their present methods and adopt instead the example of the government and install each for itself an "independent treasury", a cry of indignant protest would resound through the length and breadth of the land, and rightly so, unless it be that our modern system of credit and credit machinery for the transfer of property and payment of account, etc., is a snare and delusion.

If this be true, the government is no doubt justified in maintaining its own private purse independent of all things else. It is in that case equally true that everyone controlling money values should adopt the same rules. In short, the National Banking Act should be repealed. We are not, however, ready to return to a method closely allied to primitive barter. Concede this, and then the government is wrong—economically and logically wrong in its independent treasury. The disturbing influence on general financial affairs of excessive money hoarding by the government has been too often described to require any detailed notice here. If, then, a vote were to be taken among those who have capacity to judge of things in their true relationships, I do not doubt that the proposition to abolish the independent treasury and substitute for it the use of banking agencies as they *now* exist would receive a preponderating vote. I may be wrong in this opinion. I myself would hesitate, however, to vote in the affirmative on that proposition. I should much prefer that the motion be "laid upon the table" until our banking

system can be so amended that it shall be free, or comparatively free, from the perturbations which periodically beset us, bringing in as a consequence a partial or complete suspension of the banking function upon which society depends for the regular on-going of its business affairs.

I need hardly say that the amendments to which I refer must be in the line of unification or centralization of power. The weakness of the banking units as they now exist, so often demonstrated, must receive strength by association together or with some superior commanding agency able both to exercise control and furnish effective support. A central bank or a government bank of adequate capital properly organized for safety and efficiency is the sort of an agency to which I refer. Great Britain, France, and Germany offer good models which we may profitably study.

I say I would maintain the independent treasury until such a time as our banking system is so reënforced because, in spite of the lack of logical reasons for its existence, it has been, and is now, the only agency which can—or theoretically can—regulate and give to some extent a degree of steadiness to the erratic movement incidental to our financial and banking system as now operated.

By the intervention of the Treasury on many occasions in the past, it has averted threatened financial disaster. Given an always plethoric treasury, directed by an infallibly wise administrator (one who has never yet appeared), it could, by timely deposits of these hoarded moneys and by timely withdrawals of the same in part or in whole, give steadiness and regularity where otherwise there would be irregularity, dislocation, and panic. In these regards the independent treasury, when endowed with the needful power in money, can, and in my opinion

has, to a degree, served the purpose and discharged in a crude way the functions of a great government or central bank. This service, crude as it has been, often entirely lacking through want of power, often badly directed through lack of wisdom, is a development not anticipated nor foreseen in the laws establishing the independent treasury. It illustrates an old truth often recognized, that even out of evil good may incidentally come. Be the service to which I have referred worth little or much, it cannot safely be counted upon as a valuable factor in the future. The present overflowing treasury, through changed conditions, may, at no distant date, be in a state of exhaustion. A perfect system of government finance would indeed bring in each day from its sources of revenue a sum exactly adequate to meet its daily expenditures. We ought not, then, to permanently retain the independent treasury for the sake of its ambiguous and uncertain control as an intermediary in our financial life, with which it should by right interfere to the smallest degree possible.

My conclusion, then is, first, that it should be abolished whenever and as soon as our demonstrated faulty banking system is corrected in the direction I have pointed out rather than described; second, that the perfecting of our banking and currency system, so that it may at all times perform its important function in a safe and effective manner, both for the government and for all the people, is an end demanding the best thought and intelligent effort of financial students and political economists, and all patriotic people who desire for their country what will best make for its economic welfare.

THE UNITED STATES TREASURY AND THE MONEY MARKET.

THE PARTIAL RESPONSIBILITY OF SECRETARIES GAGE
AND SHAW FOR THE CRISIS OF 1907.

A. PIATT ANDREW.

Everyone is conversant to-day with the peculiarities and shortcomings inherent in our independent treasury system. The frequently embarrassing withdrawals of money from circulation in periods of prosperity, when currency is in urgent demand, the reinjection of the treasury hoards into the circulation when the currency is already redundant, the exaggeration of these embarrassments on account of the lack of a balanced budget,—these have become commonplaces too trite to require illustration or proof.

These obvious and admitted deficiencies of the system have, however, been much appealed to in recent years to justify interventions of the government in the money market and perversions of the law, which were in no way necessitated by the deficiencies in question. For more than fifty years after the establishment of the independent treasury, successive secretaries had from time to time been confronted with the awkward consequences of the system, and had tentatively dealt with them by expedients of one sort or another that were in accord with the letter and spirit of the statutes, but without attempting to intervene in the financial world other than to remedy the difficulties arising from the treasury system. Within

the first decade of the treasury's existence, Secretary Guthrie found himself confronted with an accumulating surplus, and proceeded in 1853 to its reduction by the purchase of government bonds in the open market. Secretary Cobb adopted the same remedy for a similar situation in 1857, and several of the later secretaries, when the government revenues proved superabundant, have followed their example. Secretary Fairchild, in the period of the great surplus of the eighties, resorted to this method upon a larger scale than any other secretary, and used the surplus in the year 1888 for the redemption of government bonds in advance of their maturity to the extent of some ninety-four millions of dollars.

After the establishment of the national banking system another method of reducing an uncomfortable surplus was offered in the provision that the public money (except customs dues) might be deposited in the national banks. This, however, was regarded as an exceptional measure only to be employed in peculiar emergencies, and no considerable resort was ever made to the banks as depositaries for ordinary revenue until within the last decade. In the course of the war the banks which assisted in the placing of loans were allowed temporarily to retain the funds obtained from bond sales, sometimes to the extent of thirty or forty millions. Throughout the seventies, however, the public deposits seldom amounted to as much as ten millions, except during the refunding operations of 1879, when the proceeds of new bond sales were left in the banks pending the repayment and withdrawal of old bonds. During the eighties the deposit of public funds did not rise above fifteen millions, until the years of the great surplus, 1887 and 1888, when Mr. Fairchild, in desperation because of the treasury's absorption of money, allowed the accruing revenues to be deposited in

the banks, and in April, 1888, the public deposits reached sixty-one millions. Up to that time the maximum amount entrusted to any one bank (except on loan account in the case of bond subscriptions) had been \$500,000, but Mr. Fairchild raised the allowable deposit to \$1,000,000. For these acts he was vehemently attacked in the public press, in campaign speeches, and later by his successor in the treasury department. Under Secretary Windom deposits were again brought down to a working balance of less than twenty millions, and there they remained until the later nineties.

Until within the last decade the use of national banks as depositaries had been treated as an exceptional measure. The national banks had been in existence for more than thirty years, but the federal treasury and sub-treasuries were still regarded as the normal custodians of the government money. In one period of heavily redundant revenues, Secretary Fairchild had gone so far as to deposit a little more than one-sixth of his total balance with the banks, but this policy had provoked general criticism, and had at once been reversed by his successor in office. Until within the last decade, also, the treasury had never ventured to intervene in the money market, except in moments of really great distress, such as the outburst of an unreasoning panic. Secretary Cobb, during the great crisis of 1857, and Secretary Richardson, in the memorable crash of 1873, had helped to restore confidence by buying government bonds on the market, but, aside from such utterly exceptional occasions, one can say with approximate accuracy that the treasury, since the establishment of its independence in 1846, had held aloof from the permutations of the market, and had made no effort to control it in one way or another. Nor had any secretary ever attempted, or probably ever thought of attempting,

to render the currency responsive to the changing needs of trade by the deliberate manipulation of the public funds.

During the administration of Secretary Gage one begins to note the transition to a new view of the treasury's functions and a new use of the secretary's power. For the first time the treasury's policy appears to be influenced by the rate of interest prevailing in the financial centers, and by the condition of the stock market. In the course of Mr. Gage's period in office, the balance in the treasury, partly as a result of good times, partly as the outcome of Spanish war taxes and bonds, once more mounted to high levels. It did not, however, reach the record heights it had touched during the administration of Secretary Fairchild. Nevertheless, during the acute stringency in the financial market in the autumn of 1898, Mr. Gage not only attempted to relieve the situation by prepaying the interest and capital of bonds, but he saw fit to allow the deposits with the banks to rise from about twenty-eight millions to ninety-five millions. Again, in the stringency of the following autumn, 1899, although the treasury balance was no larger than the year before, the public deposits were increased to one hundred and eleven millions, which constituted more than one-third of the treasury's total balance. Mr. Gage's deposits were thus almost double the maximum reached under Secretary Fairchild, although the treasury's absorption of money had not been so considerable. Moreover, it later appeared that a single institution, the National City Bank of New York, was made the recipient of more than fifteen and a half millions at a time, while another affiliated New York institution, the Hanover National Bank, was given the use of deposits amounting to more than four and a half millions. The largest award to any one bank in Mr.

Fairchild's time, it will be remembered, was limited to one million.

The change in policy foreshadowed and initiated by Secretary Gage became a full-fledged reality with Secretary Shaw. With him it became the avowed endeavor of the department to check every incipient stringency, and to prevent any contraction of credit, no matter what might have been its cause. During the five years of his service the traditions of a half century were completely set aside. The laws which had been carefully framed to limit the relations of the treasury were twisted and violated, now this way and now that. The independent treasury system became practically extinct. Mr. Shaw apparently could conceive of but three evils in the financial world, high interest rates, a decline in the prices of stocks, and a contraction of credit, but these evils, in his opinion, were so serious that they were to be corrected at whatever cost. Whenever any of these evils seemed imminent, nothing could prevent him from forestalling them. In the autumn stringency of 1902, he anticipated interest payments and bought bonds in the open market, as many of his predecessors had done; but when these measures proved insufficient to bring interest rates down, he also launched two new experiments of doubtful legality, one of which at least was of very questionable expediency. He offered to accept other than government bonds as security for deposits of public money, in the hope that he could stimulate an enlargement of the public deposits and of the note issue at the same time. He also informed the depositary banks that they need no longer keep cash reserves against their holdings of public funds. This measure at once affected about one hundred and thirty millions upon deposit throughout the country, of which forty millions were in New York. The ruling

would, if it had been carried out, have added ten millions in New York City alone to the amount held as reserve against other deposits, or the basis for forty millions of new loans, while in other parts of the country it would have justified a credit expansion of ninety millions. In New York, however, the Clearing House Association conservatively and wisely agreed not to accept the offer, and have continued the old reserve requirements against their members down to the present time. By the end of December, 1902, Mr. Shaw had increased his deposits with the banks to such an extent that they totalled over one hundred and fifty millions.

In the following summer, that of 1903, Mr. Shaw repeatedly assured the public that he would allow no stringency in the autumn, and toward the end of August he revealed the reasons for his assurance. Up to this time it had been the unquestioned belief of the department that revenue once turned into the treasury could not be taken out and deposited with the banks. When Mr. Fairchild and Mr. Gage had made large deposits with the banks, they had merely allowed the internal revenue to accumulate there as it was collected. This was a slow process, and limited the secretary's power of relieving the market to about half a million a day. On August 27, 1903, Mr. Shaw announced that, according to his ruling, money could be transferred *en bloc* from the treasury vaults to the banks, and that he had on hand about thirty-eight millions available for that purpose. In other words, he announced to the banks before any panic had occurred, that he intended to assist them if they were in need, and that he was ready to assist them upon a scale never before conceived possible. He held the entire treasury balance ready to use in support of what he took to be the needs of business. No statement could have made more explicit

his notion that it was the function of the government treasury to guard and protect the money market, to keep interest rates down and to prevent credit contraction. During the autumn of 1903 the government deposits rose to one hundred and sixty-eight millions.

In the course of the presidential year, 1904, trade slackened; there was no tension in the money market; Mr. Shaw's ingenuity was put to no further tests; his paternal policy was not brought into requisition.

In the autumn of 1905, however, business had resumed its prosperous advance, the stock market was buoyant, and money rates ran high again. In the face of severe tension, stocks nevertheless continued to rise, the general belief at the time being that the secretary contemplated his usual assistance to the banks. For some reason, however, on this occasion, Mr. Shaw abstained from his accustomed intervention. It may have been because of a natural aversion to doing what he was expected to do; it may have been because the treasury balance had declined to the lowest point it had touched since he had assumed office; it may have been because the administration was sensitive to the criticisms that had been raised against his earlier practices; it may have been because of the continued advance in the stock market which seemed to render treasury assistance superfluous. Whatever the reason for his apparent change of policy, the period of his abstinence from the money market was not destined to last long.

Early in the next year, 1906, the bank reserves in New York revealed a deficit; many stocks began to decline; there were unmistakable signs of impending contraction. Mr. Shaw once more resumed his policy of supporting the market, first of all more or less surreptitiously, then openly. His first step was a private arrangement with

the most influential of the New York banks, by which that institution was to import gold, and be allowed to count the metal in transit as part of its reserve. This peculiar and unannounced arrangement went on for several weeks, possibly months, before a similar privilege was openly extended to the other banks. Not until April 14th did Mr. Shaw make virtually the same offer publicly and without discrimination. He then announced that he would deposit government money with any bank which engaged to import gold, so that interest would not be lost during the period of shipment. Mr. Shaw claimed that in this way approximately fifty millions were brought from abroad, and at any rate forty-nine millions were deposited in the New York banks, or the basis for a loan extension of nearly two hundred millions. Of these forty-nine millions of public funds it is worthy of passing note that thirty-one were placed with a single institution, the National City Bank.

In the late summer the stock market entered upon its last ill-advised upward swing, under the lead of influences that are well known, and in September the bank reserves again revealed a deficit. Once more Mr. Shaw poured oil upon the fire and repeated his operation of the previous spring. This time forty-four millions of government money were turned into the New York market (of which twenty-five went to the National City Bank), ostensibly as an artificial stimulus to the import of gold. They represented Mr. Shaw's last effort to prevent a contraction of credit, his last contribution to the advance of the stock market, for before another period of money tension had arrived, Mr. Shaw had withdrawn from public life, and had been welcomed to other fields of usefulness.

Events have moved rapidly since Mr. Shaw left office,

and we are already in a position from which we can survey some of the consequences of his policy in perspective.

For an entire decade banking credit had been expanding with scarcely a momentary halt. The movement in its duration and extent was doubtless in large part attributable to the vast additions made during the period to the money supply in the way of gold and banknotes. Nearly a billion dollars had been added to our supply of gold and about three hundred millions to our bank circulation, which meant an average annual increase for ten years of about one hundred and thirty millions. A considerable part of this increase had passed into bank reserves and had naturally formed a basis for enlarged credit. But the community's credit as registered in bank deposits had increased far more rapidly than the money supply. The total of individual deposits in all of the banks, according to the Comptroller's figures, had increased at the rate of about five hundred and ninety millions per year. Nor did this result merely from the fact that upon a given basis of money a multiple quantity of credit can always be created. It meant more than that. It meant that the proportion of credit to the currency in the country had also been increasing, for the ratio between the country's money and the bank deposits in 1896 had been as 100 to 182, but in 1906 credit had increased, so that the proportion stood as 100 to 310.

It is worth while also to examine the relative proportion in which different classes of bank credit had increased, especially in New York, where Mr. Shaw's operations had been most extensive. Here one can see most plainly the traces of his policy of stock market relief. If we compare the classification of loans in the national banks of New York City in September, 1896, with the same classification in September, 1906, we find an altogether

disproportionate and enormous increase in the loans to the stock market, as compared with industrial loans. Loans on time against commercial paper had increased by seventy-three per cent., but loans on time secured by stocks and bonds had increased by one hundred and seventeen per cent., and loans on call secured by stocks and bonds had increased by as much as one hundred and seventy-five per cent.

Much the same story of disproportionate credit in the security market is told by the statistics of price movements during the period. The index numbers constructed by the Bureau of Labor registered a rise between 1896 and 1906 in the prices of raw commodities of forty-nine per cent.; in the prices of manufactured commodities of thirty-seven per cent., and an average increase among all commodities of thirty-five per cent. To the average weekly wages of workingmen an increase of eighteen per cent. was attributed. If, however, we set alongside of these figures the movements in the prices of securities as tabulated by the *Wall Street Journal*, we find a most startling contrast. In the case of twenty leading railroad stocks, the increase in price amounted to two hundred and twenty-eight per cent., and among the twelve leading industrials the rise in prices reached even as high as two hundred and sixty-eight per cent. Security prices had been carried upward beyond all reason, and beyond all proportion with their earning capacity. Figures recently published show that the dividends of twenty leading railroads at the topmost prices of 1906 averaged a yield of scarcely more than three per cent. Some, like the Philadelphia and Reading, offered less than two and a half per cent., or below the normal yield of a gilt-edged first mortgage bond. These rates, it must be remembered, were particularly low because they occurred in a period when

money was depreciating, and when interest rates would naturally have been high. One of the reasons for this anomalous condition unquestionably was that Mr. Gage and Mr. Shaw had for the greater part of ten years resisted with all the vast resources of the government treasury the natural tendency of interest rates to follow the rising level of prices. They had, in fact, succeeded in keeping the money rate of interest below the rate which would have been "normal" or "natural" with a depreciating currency. They had kept alive a continuously excessive demand for credit, by making it available at less than the normal cost. They had sown the wind and their successor was to reap the whirlwind. They had helped to raise the tower of credit to a tottering height, and now the slightest agitation of any sort was sure to bring collapse.

Mr. Cortelyou became secretary of the treasury on March 4, 1907, and before he had had time to settle himself in his new office, or to outline any general policy, the fiduciary structure fostered by his predecessors began to waver. Within ten days of his assumption of office the stock market experienced the most severe recession of several years, and Mr. Cortelyou found himself swept along by the precedents of Mr. Shaw, now extending to the banks' relief in the form of more government deposits, now offering again to accept railway bonds as security for such deposits, then offering to anticipate interest payments and also to redeem bonds in advance of their maturity. In thus retracing Mr. Shaw's footsteps he apologetically explained that this action must not be regarded as a precedent. It was even implied that eventually he hoped to arrange the affairs of the treasury so that the department would not have such close relations with the New York market. This idea seemed to

be confirmed early in May by the announcement that he had appointed a commission of five to consider the whole question of the deposit of public funds in the national banks.

In August, however, came a second and more severe setback in the stock market, and Mr. Cortelyou by this time seems to have adopted his predecessor's theory as to treasury responsibilities, for on the 23d he came forward with a plan which may almost be said to have outshined Shaw. He announced that, beginning with the first week in September, he would make deposits with the banks regularly for a period of at least five weeks, and that while so doing he would publish no information as to the amount of these deposits, or as to the manner of their distribution. He also suggested that, in his opinion, this was a plan which might with advantage be followed annually in the weeks of autumnal stringency. In the course of the next six weeks the deposits of the treasury with the banks increased by about nineteen millions, and in the middle of October they totalled one hundred and seventy-six millions.

Toward the end of October came the third great break in the market, and the actual outburst of the panic, the details of which are too fresh in memory to bear repetition. It suffices to say that in its three opening days, between Wednesday, October 23d, and Saturday, October 26th, Mr. Cortelyou turned more than thirty-one millions of the public funds over to the banks of New York City, carrying the total of government deposits in the national banks of the country to the enormous level of two hundred and nine millions. The power of the federal treasury to support the tottering edifice of credit had, however, at last reached its limit. The props snapped under the overwhelming weight. The financial frame-

work collapsed, and on Monday, October 28th, the vast majority of the banks in the country suspended payments. Of the efforts of the secretary in subsequent weeks to reërect the fallen structure, of his increase of the government deposits to two hundred and forty-two millions, and of his preposterous plan to borrow one hundred and fifty millions additional in order to turn them over to the banks, nothing need be said, except that they proved futile, and that the latter plan was generally condemned as ill adapted to afford either immediate relief or future safety.

Such is the story of the treasury's decade of paternalism. Beginning modestly under Secretary Gage, it developed flamboyantly under Secretary Shaw, and reached its logical and helpless end under Secretary Cortelyou. It is a story of arbitrary and lawless meddling, sometimes involving favoritism, on the part of the treasury. It is a story of resultant improvidence on the part of the banks, involving in the case of the New York banks the lowest average reserves of any of the four decades since the national banks were organized. In the stock market it is a story of the most extravagant speculation since the Civil War. The end of the story has been the most general and prolonged collapse of the country's credit system in the history of the national banking system.

The completed record of these ten years shows very clearly the importance for the future of again divorcing the treasury from the money market. One cannot but hope that, with the return of settled conditions, either the commission which Mr. Cortelyou appointed last year, or Congress itself, will see the wisdom of putting aside the unhappy legacies of Secretaries Gage and Shaw, and will once more establish relations between the government

treasury and the banks which are automatic and involuntary.

This end might be attained in various ways. It could, I believe, be best attained if the secretary were required to deposit with the banks daily all receipts in excess of a fixed balance, and if the deposits were made available upon the same terms to all national banks. The treasury would then be relieved from any possible charge of discrimination or of market favoritism; and the banks would be debarred from the unwholesome expectation of outside relief, the existence of which is to-day a continual incentive to unpreparedness. A solution of this sort involves, of course, the working out of various questions of detail in distributing the deposits, such as the question as to how far from the place of its collection surplus revenue shall be distributed; the question as to the relation between the amount to be deposited and the capitalization or resources of the individual banks; the question whether the government shall charge a fixed rate of interest, or allow the banks to bid for the privilege of receiving the public funds; and the question whether the government deposits shall be given any peculiar security. None of these questions, however, will be found insoluble, if subjected to earnest inquiry.

THE RELATION OF THE UNITED STATES FEDERAL TREASURY TO THE MONEY MARKET—DISCUSSION.

EDWARD W. BEMIS: Will Professor Andrew, or anyone else, tell us the objection to the following simple plan of meeting the demand for an emergency circulation during times of panic?

Let the Government offer greenbacks in any amount called for to any individual or corporation or bank which will deposit the proper security of government or municipal bonds. Let the said emergency circulation be subject to such a tax, or interest charge, as one may be pleased to call it, as would induce the return of the money to the Government as soon as the serious emergency is passed. Perhaps an interest charge of 7 per cent., or even of 10 per cent., would be proper. The amount of charge could easily be adjusted by experiment.

Is there any objection to the principle, and would it not accomplish, in times of panic, about as much as the more elaborate plans contemplated? This plan is not so very different from the so-called interconvertible bond schemes urged by Mr. Windom when Secretary of the Treasury, but contemplates a higher rate of interest on the emergency circulation than was provided for by his plan.

Of course this would not go to the root of the question of the causes of industrial depression, but would certainly free such depression from some of its present seriousness.

Undoubtedly one great cause, but by no means the only one, of the present depression has been the readiness of our banks all over the country to abandon their position

as in a measure trustees and protectors of the financial interests of the community in which they are placed. They have been ready to loan at high rates of interest on speculative stocks and even to invest directly in them, instead of taking care of the demand for loans on good commercial paper of the business men in their vicinity.

But I would like to learn, from Professor Andrew or others, what objection there is to the type of emergency circulation just mentioned.

(To the above Professor Andrew replied that if the rate of interest or tax on the emergency circulation were placed low enough to help in the usual Fall scarcity of money when the crops are moved or when the balance of trade seemed to call for it, the issue might also be used to further stock speculation and an injurious expansion of credits and prices would result: but that if the proposition was to have the tax so high that the emergency circulation would only be called for in times of panic, resort to the issue would call attention to the existence of a panic, and would not be made until too late to afford relief.)

ALLEN R. FOOTE: One criticism of the Federal Treasury relates to its absorption of funds from the channels of trade and the accumulation and centralization of the same in the Federal Treasury.

Another criticism is the use made of such accumulated funds by an arbitrary return of the same to the channels of trade in spasmodic efforts to relieve the pressure in the money market on the request of banking institutions. Both of these evils may be entirely overcome by the adoption of a Federal depository system similar to that in use in several states.

I have in mind one state which a few years ago had no

depository law for its state funds. At that time the entire amount of the funds owned by the state was supposed to be always in the vaults of the state treasury at the Capitol, entirely withdrawn from the channels of trade and unproductive. At the present time this state has a depository law for state funds and for county funds and municipal funds, and an effort is about to be made to extend the law to all public funds of every character. The state now has an annual income of about \$100,000 from interest upon the deposit of state funds. The rate is a flat rate of 2 per cent.

This system could easily be extended to the requirements of the Federal Government by a law requiring the deposit of all funds collected for the government, from whatever source, including post office receipts, in national banks located in the community where such collections are made. The accounts between collectors and the Federal Treasury could be settled by remittance of certificates of deposit from the banks in which the deposits were made without any transfer of funds.

The banks receiving the deposits should be required to pay 2 per cent. interest on daily balances and hold the deposits subject to check as is customary with commercial accounts.

The disbursements of the Federal Treasury should be made by checks upon the depository banks in the community where payments are due. This system will prevent the withdrawal of funds from the channels of trade; will create an income for the Federal Treasury on account of the use of its balances in the depository banks, and will prevent the centralization of funds in Washington or in the sub-treasuries.

It will also take the Federal Treasury out of the speculative money market, because the Treasury will at

no time possess a large centralized fund that has been withdrawn from the channels of trade which it can return to the channels of trade to relieve pressure in the money market at the request of banking interests.

Under this system, all money collected for the Federal Government will remain in the community where collected, excepting in those cases where the disbursements of the Federal Treasury are less than the amount of collections in a community. In such cases the unused balances will be transferred directly to other communities where disbursements exceed the amount of collections. This system will place the deposit accounts of the Federal Government in the same position as the accounts of private business. As the Federal Government inspects all national banks and, practically, through such inspection, certifies to the people that such banks are solvent and trustworthy depositaries for the funds of the people, there is no logical reason why the Federal Government should not use the same banks for its deposits on the same terms it encourages private persons to make their deposits.

WILLIAM A. SCOTT: I have been hoping that some patriotic adherent of the present administration would arise and defend the course of the Secretaries of the Treasury who have been so severely criticised by Mr. Andrew. Since no one has done so, I am inclined myself to say a word along this line.

I dislike our independent treasury system quite as much as either of the gentlemen who have spoken, and I agree with them in the opinion that it should be abolished at the earliest possible moment. In discussing this question, however, we should carefully distinguish between the system and the men who have been obliged to administer it. Criticism of the former does not necessarily imply

criticism of the latter. I cannot but feel that, both in his article in the *Quarterly Journal of Economics* and his address this evening, Mr. Andrew has done injustice to Mr. Shaw and other recent incumbents of the office of Secretary of the Treasury. I think he has exaggerated the effects of their actions on the stock market in New York and the influence which stock market operations have had upon them. A careful analysis of fluctuations in stock exchange values in recent years will show, I think, that the most important of them have been quite independent of the Secretaries of the Treasury, and I doubt if the actions of Secretary Shaw and others have been determined by consideration of the stock market and its needs to the extent suggested by Mr. Andrew.

We must remember that the Secretaries of the Treasury have been confronted by conditions over which they had no control. Since the fall of 1905 the New York money market has been in an almost constant state of stringency, for which the normal operations of the independent treasury system have been partly responsible. What were Secretary Shaw and others to do? Clearly they were under obligation to use the treasury hoards in such a way as in their best judgment would afford the maximum of relief. It is easy to criticise their judgment. No man ought to have been asked to take such responsibility, and no man could have performed such a task without subjecting himself to criticism. But since Congress has persistently refused to correct the evils of our currency system, in my opinion the Secretaries of the Treasury have been justified in going as far as the law would allow, and perhaps at times in stretching the law a little, in order to render all the assistance possible.

DAVID KINLEY: There is one point on which I wish to make my own position perfectly clear. It is this: I do not believe that the actions of the banking interests of the country in the last few years justify us in entrusting to them the reformation of our currency. The recent behavior of certain great banks in New York alone militates against the proposal of the American Bankers' Association for asset currency.

THE PUBLIC SERVICE COMMISSIONS LAW OF NEW YORK STATE.

HON. THOMAS M. OSBORNE.

Not long ago, New York's Public Service Commission of the Second District held a session in the city of Rochester. A gentleman representing the Chamber of Commerce of that city opened the proceedings by a brief address, saying some pleasantly flattering things about the Commission, and eulogizing the Law which had formed it; adding in effect that the business men of Rochester had favored the Law and welcomed the Commission; that they welcomed it especially because they regarded it as a great barrier of safety for the business world against dangerous socialistic ideas—such as Government ownership of railroads and the like.

Sitting as a member of that Commission, I could not help smiling at an amusing coincidence. Exactly one hour before, on the train coming from Buffalo that morning, I had been greeted by a pleasant gentleman, who introduced himself, saying that he had attended all our sessions in Buffalo; adding with much enthusiasm that he especially welcomed the Public Service Commissions Law, as he regarded it as the first great step in the direction of Government Ownership.

It is surely not often that a law can thus receive the unqualified approval of those who are diametrically opposed in their theories; and I am inclined to think that it is an evidence of the real statesmanship underlying the Law that it can be thus recognized by both sides as a step

in the direction of ultimate Truth—whatever the nature of that ultimate Truth may turn out to be.

In the relation of its Public Service Corporations to the Public on the one side and the State on the other, New York has suffered as much as any state of the Union from reckless disregard of the rules of sound finance. In fact we have had more than our share of that violation of monetary sanity, of economic morals (to say nothing of economic decency), which has attended the great development of our public utilities in the last fifty years. From the days of the old New York Central and Erie railroad fights, down through those of the Broadway surface railroad to those of the "Interborough Metropolitan", that history has been one of disorder, scandal, and disgrace. The public conscience, stimulated by the public interest, has at times cried out and effected spasmodic reforms; but New York public service corporation finance has still remained what old John Adams nearly a century ago called its politics, "the Devil's own Incomprehensible."

But of late years, stimulated by more careful analysis and study of the fundamental character of public utilities on the part of lawyers and economists, there has been growing up a deep and wide-spread sense of injury and grievance. It is not unnatural that this should be so; how could it be otherwise, when the people watched the operations of various reckless promoters and financiers, and saw those favored individuals amassing vast fortunes, the origin of which lay in the public grants or franchises given away by state or municipalities—and too often given by faithless public servants under revolting concomitants of bribery and corruption?

It would be a tempting task to enter upon a detailed study of the various elements in the resulting situation,

and especially as related to politics; but such an inquiry would carry us too far afield. To understand the origin of the New York Public Service Commissions Law, however, it is necessary to refer briefly to the state election of 1906 and to recall the fact that at that time the wrath of a long-suffering and much abused public seemed to be fast gathering to the point of political explosion.

It is at such periods, when the people have lost confidence in its servants, in its old leaders, in the very framework of the social structure,—has apparently almost lost faith in democratic self-government itself and is calling for some political Moses to lead it out of its bondage—that there comes the moment eagerly awaited by the Demagogue. Trading upon the righteous anger of the just, upon the prejudices of the unreasoning, upon the cupidity of the mercenary, upon the timidity of the politician, the Demagogue becomes suddenly a menace to society; a menace, not because he may not be entirely right in his analysis of the situation, but because from the nature of the case he is a destructive and not a constructive force; and because he is always seeking, not how to apply genuine remedies—not how to safeguard the interests of the mass, but only how to turn the situation to his own personal advantage; a menace, because even if he is honest in his aims he has faith in progress by revolution rather than progress by evolution—believing in miracles rather than in science.

The difference between the demagogue and the statesman is cleverly illustrated in a story told by Lord Cromer in a recent speech:

“A conjurer exhibited in London some few years ago. He invited one of the audience to lend him his hat. He then, to all appearances, cut it into small pieces, and eventually, of course, gave it back to the owner uninjured.

He then invited anyone among the audience to do the same. A young officer of the army stepped on to the platform and said he would like to try. He borrowed a hat from a confiding old gentleman, and cut it into small pieces. Then he stepped down from the stage with the remark, 'I can only do the cutting part. I leave the rest to the professional conjurer.' The owner of the hat" adds Lord Cromer dryly, "was not altogether satisfied."

It is distinctly to the credit of the people of New York State that in the midst of a genuine crisis of political feeling there should have been shown such careful weighing of all considerations before political action; that amid forceful appeals to passion and prejudice, based upon undoubted public grievances there should have been upon both sides so much honest endeavor to think clearly and act justly. Probably at no election ever held in New York was there so complete a breakdown of the ordinary political barriers. Republicans by thousands voted the Democratic ticket in whole or in part; Democrats by tens of thousands voted the Republican ticket in whole or in part. While outwardly the old party forms were maintained, in reality party ties in a large measure ceased to exist.

It was in truth not merely an interesting—it was a momentous election; and one the importance of which, not only to the people of New York State but to the whole nation, becomes more evident the farther away from it we get. As the campaign developed it became a genuine choice between the Gospel of Disorder,¹ under cover of a righteous outbreak against existing conditions on the one side, and on the other calm, sane, and orderly pro-

¹"As between Rottenness and Riot", said Mr. Burke Cochran, when defending his candidate at the Buffalo Convention, "I prefer Riot." An unique way, certainly, of recommending a man as nominee for Governor.

gress. And it is a humorous illustration of the irony of history that the Republican party, which of the two political parties may fairly be held far the more responsible for the evils of the situation, should have been the one to place in nomination a genuine reformer; while the Democratic party should have thrown away the chance of a generation by allowing its opponents to play once more the old game so aptly described by Disraeli at the time of the repeal of the Corn Laws, when he averred that Peel had caught the Whigs in bathing and had run off with their clothes.

The result of the election was to seat in the Governor's chair an able and successful lawyer, a Republican who aims always to place state interests before partisan advantage, a man of the sincerest and most confirmed honesty, of high ideals of public service, of determined convictions, yet open mind; moreover, a man who realized fully that his election was simply an expression of public confidence in him personally in the midst of his party's defeat. Governor Hughes realized to the full the political difficulties of the situation, and the dangerous temper of the public mind along with the genuine grievances which lay behind and were the cause of it; so he at once set himself to grapple with the dangers and difficulties of the situation in the calm temper of a true statesman. The Public Service Commissions Bill was the outcome.

II.

The law as it was passed contains five articles; the first establishes the Public Service Commission and deals with certain general provisions; the second lays down the provisions relating to railroads, street railroads, and other common carriers; the third states the powers of the Commission relating to such railroads, street railroads

and other common carriers; the fourth deals with gas and electric corporations; and the fifth abolishes former railroad, gas and electricity, and rapid transit Commissions and ends with a few general provisions.

The main points of the Law may be briefly touched upon:

1. By Article One the State is divided into two districts with a separate and independent commission of five for each district. The first district includes what is known as Greater New York—the four counties of New York, Kings, Queens, and Richmond (or New York City, Brooklyn, Long Island City, and Staten Island), and the second includes all other counties in the State. The reason for this is perhaps more obvious to a New Yorker than to anyone outside the State; but the truth is that the problems in the two districts are so very distinct that the wisdom of the separation has become more and more apparent since the two commissions began their labors. For instance, the great problem of rapid transit in New York City, involving the building of subways, and the closely related and equally difficult problem of regulating the vast traffic across Brooklyn Bridge at the end of each working day, have no counter-parts up the State. On the other hand, the State has its own peculiar problems; the network of railways, large and small—each with its own system of management, good or bad—each with its own financial history, creditable or otherwise, and its existing or proposed issues of securities as a result of that history—this lies entirely outside of the City. In the City there is but one problem involved in the question of gas or electrical supply; in the State there are almost as many problems as there are communities with corporations supplying gas and electricity. One might say that in the City each problem is an obstinate and

gigantic unit, while in the State each problem has such a dazzling multiplicity of units that it is both bewildering and elusive; in short the advantage of separate commissions must be obvious upon any serious consideration. (Sec. 3).

2. The ten Commissioners—five for each district—are appointed by the governor with the approval of the senate, and subject to removal by the governor “for inefficiency, neglect of duty or misconduct in office”, after serving charges and giving due opportunity for a public defence. When the Law was passed some objections were made to giving the governor this practically arbitrary power of removal; but it is obvious that that power should rest somewhere, and it is far better to throw the responsibility clearly upon the governor, who is and should be responsible for the administrative part of the State government, than to make him share that responsibility with a body like the senate. It is not possible to hold the individual members of a senate to account for failures in administration; but it possible to hold the governor to account where he has the power of removal and appointment.

In politics as in business there is necessity for focusing the responsibility clearly upon the individual; and my own experience in city administration leads me to believe that where any legislative body is called upon to undertake the work of appointment or dismissal, which is properly an administrative function, it is more likely to keep an unfit public servant in office than to assist in ejecting him. If it is desirable to give the senate any right to participate in a removal, then the power to remove should be granted to either the governor or the senate acting independently. Such an arrangement would obviate such a long and unedifying deadlock as

occurred between governor and senate some twenty-five years ago, in an effort to secure the removal of Thomas C. Platt from the office of Quarantine Commissioner. (Sec. 4).

3. After providing for Counsel, Secretary, and business force, the law proceeds to declare ineligible to appointment as Public Service Commissioner anyone holding "official relation to any . . . corporation subject to the provisions of this act, or who owns stocks or bonds therein." (Sec. 9.)

The law also provides that no commissioner or employee of the commission shall "solicit, suggest, request or recommend, directly or indirectly, to any common carrier, . . . the appointment of any person to any office" or to receive "any free pass or transportation or any reduction in fare . . . or any present, gift, or gratuity of any kind" from any corporation subject to the law. As the State pays traveling expenses when on business of the commission this provision is eminently wise, as it prevents the sense of obligation which such favors inevitably tend to produce, even when the favor is dictated by the law itself. (Sec. 15).

4. A convenient and necessary provision gives each commissioner the full power of the commission in all investigations and hearings; although any order of a commissioner must be approved and confirmed by the commission before it becomes operative. Five hearings can therefore be going on at once, if necessary, and thus more work accomplished in a given time. (Sec. 11).

5. That at hearings and investigations the commission need not be governed by the technical rules of evidence is another clear advantage in the work of the commission. To the mind of many laymen, the rules of evidence often seem admirably calculated to delay the truth, if not

to distort, obscure or conceal it; and in the work of the commission it is desirable to get at the facts as quickly and as clearly as possible. The object to be gained in most cases is immediate relief of some sort, and obviously "the law's delay" would largely destroy the efficiency of the commission. (Sec. 20).

6. All witnesses are duly protected; the law providing that "no person shall be prosecuted, punished, or subjected to any penalty or forfeiture for, or on account of any act, transaction, matter or thing concerning which he shall under oath have testified or produced documentary evidence"; but this immunity does not extend to the corporation with which the witness may be connected. (Sec. 20).

The commission is given ample power to force the attendance of witnesses and secure their testimony—refusal constituting a misdemeanor.

7. Article II prescribes the duties of Common Carriers, which term includes, according to the wording of the act, "all railroad corporations, street railroad corporations, express companies, car companies, sleeping car companies, freight companies, freight line companies, and all persons and associations of persons, whether incorporated or not, operating such agencies for public use in the conveyance of persons or property." (Sec. 2). Such common carriers:

(a) Shall furnish to the public "such service and facilities as shall be safe and adequate and in all respects just and reasonable"; and "all charges made or demanded . . . shall be just and reasonable and not more than allowed by law or by order of the commission." (Sec. 26).

(b) Shall provide proper switch and side-track connections. (Sec. 27).

(c) Shall file and keep open for "public inspection schedules showing the rates of fares and charges for the transportation of passengers and property"; and no such rate shall be changed without a thirty day notice to the commission unless duly authorized by the commission. (Sec. 28 and 29).

(d) There shall be no "special rate, rebate," or unjust discrimination of any kind; no "undue or unreasonable preference"; no "free ticket, free pass, or free transportation of passengers or property" except to officers and employees of the railway and their families, ministers of religion, inmates of hospitals and other specified individuals. But this provision shall not prevent "the issuance of mileage, excursion or commutation passenger tickets, or joint interchangeable mileage tickets", nor "the issuance of passenger transportation in exchange for advertising space in newspapers at full rates". Of course this latter exception to the general rule should be uniform; for instance a special commutation rate from Yonkers to New York must be open to anyone in Yonkers. (Secs. 31-33.)

(e) "Every railroad corporation or other common carrier engaged in the transportation of freight shall, upon reasonable notice, furnish to all persons and corporations . . . sufficient and suitable cars for the transportation of freight in car-load lots". Railroads and street railroads "shall have sufficient cars and motive power to meet all requirements for the transportation of passengers and property." And "the commission shall have power to make and by order shall make, reasonable regulations for the furnishing and distribution of freight cars to shippers, for the switching of the same, for the loading and unloading thereof, for demurrage charges in respect thereto, and for the weighing of cars and freight

offered for shipment or transportation by any common carrier." (Sec. 37).

8. Article III continues the provisions relating to Common Carriers, dealing especially with the powers of the commission for carrying the provisions of Article II into effect. Power is given to the commission:

(a) To examine into the "general condition, their capitalization, their franchises" and management of all common carriers. (Sec. 45).

(b) To examine all books, contracts, records, documents and papers and to compel their production. (Sec. 45).

(c) To conduct hearings and to take testimony on any proposed change of law relating to any common carrier, if requested to do so by the legislature, the senate or assembly committee on railroads, or by the governor. (Sec. 45).

(d) To prescribe the form of annual reports. (Sec. 46).

(e) To investigate accidents—such as in the judgment of the commission require investigations; and immediate notice to the commission of all accidents is prescribed—the Law requiring the office of the commission to be kept open from 8 A. M. to 11 P. M. (Sec. 47).

(f) To investigate as to any act done or omitted to be done by the common carrier "in violation of any provision of law or in violation of any order of the commission." (Sec. 48).

(g) To fix rates and service. (Sec. 49.)

(h) To order "repairs or improvements to or changes in any tracks, switches, terminals. . . . motive power, or any other property, or device. . . . in order to secure adequate service." (Sec. 50).

(j) To order changes in time schedules by an in-

crease in the number of trains, or cars or motive power, or by changes in the time for starting trains or cars. (Sec. 51).

(k) To establish a uniform system of accounts, and prescribe the manner in which such accounts shall be kept. (Sec 52).

9. The approval of the commission is necessary in various cases:

(a) No construction of a railroad or street railroad or any extension of existing lines shall be begun without such approval. (Sec. 53).

(b) "No franchise nor any right to or under any franchise, to own or operate a railroad or street railroad shall be assigned, transferred or leased" without the approval of the commission. (Sec. 54).

(c) No railroad or street railroad or other stock corporation shall purchase, acquire, take or hold any part of the capital stock of any other road without the approval of the commission. (Sec. 54.)

10. No stocks, bonds, notes or other evidences of indebtedness (except notes payable within twelve months) shall be issued without an order from the commission authorizing such issue, stating that in the opinion of the commission the use of the capital to be secured by such issue, is reasonably required for the "acquisition of property, the construction, completion, extension, or the improvements of its facilities, or for the improvement or maintenance of its service or for the discharge or lawful refunding of its obligations."

But it is expressly provided "that the commission shall have no power to authorize the capitalization of any franchise or the right to own, operate or enjoy any franchise whatever in excess of the amount (exclusive of any tax or annual charge) actually paid to the state

or to a political subdivision thereof as the consideration for the grant of such franchise or right”.

A merger or consolidation of existing companies is not forbidden; but the law provides that “the capital stock of a corporation formed by the merger or consolidation of two or more other corporations (shall not) exceed the sum of the capital stock of the corporations so consolidated, at the par value thereof, or such sum or any additional sum actually paid in cash; nor shall any corporation hereafter issue any bonds against or as a lien upon any contract for consolidation or merger”. (Sec. 55.)

11. The penalties for failure to comply with an order of the commission are drastic. Every day's violation constitutes a separate and distinct offense and for each offense the offender incurs a penalty of \$5,000 if a common carrier, or \$1,000 if a corporation other than a common carrier. Every individual who procures, aids or abets any violation or who fails “to obey, observe and comply with any order of the commission or any provision of the commission, or who procures, aids or abets any such common carrier or corporation in its failure to obey. shall be guilty of a misdemeanor”. (Sec. 56-58).

12. In case the commission shall be of opinion that a common carrier by action or failure to act is violating the law or an order of the commission, it shall direct counsel to commence an action to secure relief by way of mandamus or injunction; and the court shall require an answer within twenty days. (Sec. 57.)

13. Article Four applies practically similar provisions to the Gas and Electrical Companies of the state. It also provides for inspection of all gas and electric meters. (Sec. 67.) The commission has the right to fix rates upon proper complaints as to quality or price, not only

that supplied by private persons and corporations, but by municipal lighting plants as well; it has the power to examine the books and the affairs of the producers, to approve of all incorporation and franchises, and of all stocks, bonds, and other indebtedness; in short, the aim of this article is similar to the preceding, although having been drafted with less success it is in places somewhat obscure. It is to be hoped that amendments to the law will soon remedy these defects.

14. With the abolition of the former Railroad, Gas and Electricity, and New York City Rapid Transit Commissions, and the Inspectors of gas meters, the bill ends with the necessary provisions for the transfer of records, the continuance of pending actions and proceedings, and the necessary appropriations.

To call this law a piece of radical legislation is to speak mildly; it seems to mark an epoch in the history of our State, for the corporations affected by the drastic provisions of the law are among those upon which the whole structure of our present civilization rests. Without the railroads modern commerce would be impossible; without the street railroads our cities could not spread their vast populations out into their ever-growing suburbs, and social conditions would be completely altered; gas and electricity are not merely essential to our comfort, they are necessary to the existing business order—all of these public utilities are vital elements in the lives of every one of us, and a law which compels such a complete readjustment of their relations to the state on the one side and the public on the other is not only radical, it is revolutionary.

III.

With many people the mere suggestion that the state or a municipality should undertake to regulate any busi-

ness hitherto in private hands is at once denounced as "socialism". I must confess to having only the vaguest notion of what "socialism" in an economic sense is, but, judging from the current use of the term, it means anything which you want the State to do that I don't want it to do. It has been urged against the Public Service Commissions Law that it is "socialism"; perhaps it is, but the people are not going to be frightened by a mere word. The exact point where private action may best end, and the community itself should take hold, has certainly not been discovered yet; nor is it likely ever to be settled, for social conditions shift quite as rapidly as social experiments are made; and where shall we draw the dividing line?

Some lawyers will tell us that there is no dividing line in this particular matter—that there is no essential difference between a public service corporation and any other; and that it is simply a question of public policy as to what business the state shall undertake to regulate, and what it shall leave without interference. Others will say that, however hard it is to draw a dividing line, yet there is certain territory which is quite obviously on one side of the line, wherever the line may be, and certain territory quite as obviously on the other. Also, it seems to be true that a certain business may stand on one side of the line in one generation and occupy the other side in the next. For many centuries it was public policy to subject the inn-keeper to stringent regulation in the public interest, but with the growth of modern conditions it has ceased to be necessary, and a modern hotel company can hardly be considered as a public service corporation. On the other hand, when a virtual monopoly in the supply of some necessity of life has come into existence, that business certainly seems to be drifting over the line into

territory where some sort of public regulation seems inevitable.

Competition was formerly recognized as the essential basis of trade, and so naturally, in the matter of modern public utilities, it was at first assumed that the safeguard of the public would be competition. Therefore, legislatures chartered rival railroads, and common councils granted franchises to rival trolley, gas and electric companies, only to find that almost inevitably, after a brief period of cut-throat competition, which threatened failure to both sides, there was consolidation, over-capitalization, and relatively, if not actually, higher charges—and thus for the poor consumer the last state was worse than the first.

In New York we have at last waked up to the fact that in these public utilities there has not only never been any genuine, open competition, but from the nature of the case there could not be. We are also learning that in these businesses especially, if justice is to be done to the buyer as well as to the seller, in place of competition something must be substituted; and that something we are now to try in the shape of State regulation.

All the businesses which are placed under the jurisdiction and supervision of the New York Public Service Commissions are all more or less monopolies dependent upon some form of public grant or franchise. Our railways are not only great modern public highways, but the companies that own them own also the means of traversing them and of transporting goods along them.

Our street railways occupy the public thoroughfares under exclusive grants from municipalities. The gas companies must get permission from the city to dig up the public streets, and electric light companies to erect their poles. Express, freight line, and sleeping car companies

only supplement the work of the railway. One and all would be unable to exist except for the public grant which is their foundation; and all of these come well within the territory of public service corporations, which should be subject to state regulation.

The reasoning under the old theory of the relation of the state or municipality to its public utilities was something like this (let us take a gas company for instance):

1. The people of the city need gas.
2. Here is a company of investors willing to spend the money necessary to supply the people with gas.
3. To establish its business the company needs a franchise to lay pipes along the public streets.
4. The city can well afford to permit the use of the public streets for the benefit of the gas consumers; especially as the gas company promises to light the city streets at a reasonable rate.
5. By such use of its streets the city loses nothing; for the people gets its supply of gas and the city gets its streets lighted.
6. The gas company is entitled to make all the money it can out of the private consumer. So long as the price of gas to the city is reasonable, the private consumer must take care of himself; if he does not like gas at the company's price he can go back to lamps and candles.

This was ingenious reasoning, but its fallacy is now getting to be quite obvious; it is not true that the gas company has a right to make all it can out of the private consumers; for whenever the company pays upon the money actually invested a higher return than is just and reasonable—making, of course, a liberal allowance for the risk of new enterprise and whatever is necessary as incentive for good management;—whenever, for instance, over and above such just and reasonable returns the gas com-

pany declares stock dividends from its surplus, or when it issues stock which is not based upon actual capital invested, it is in reality capitalizing for the benefit of its stockholders property which belongs to the city;—which belongs to the city in spite of the fact that the common council may have granted that franchise in perpetuity to the gas company. For when the city legislature grants a franchise in perpetuity it gives away what does not belong to it to give, what does not even belong to the public—the existing generation of citizens,—but which belongs to the whole community of to-day, of to-morrow, and so on to the end of time.

The fundamental mistake we have been making in all these years it is now easy to see—we have not realized the essential nature of the franchise—nor the essential difference between the ownership of a private business, subject to competition, and the operation of a public utility under a monopoly. Our ordinary American citizen, intent upon his own business and satisfied if he was making it pay, was also satisfied if he was getting from railroad, express company, telegraph or telephone the service that his own particular business required; and he was little inclined to question the right of investors, who were bringing to him the business advantage of a very necessary public service, to do what he himself was doing—make as much money as possible on the investment.

The old theory, therefore, was that railroad or gas company, under a minimum of public supervision, should be managed like private business corporations, — primarily, if not exclusively, for the financial benefit of the investors. To be sure, under the fostering care of the older generation of railroad manipulators, that theory received some rather severe shocks, and we realized that the investors frequently failed to get their share of the

profits; nevertheless, whatever the practice, the theory was still held to be sound. But of recent years our ideas have changed, as we have seen railroads utilized by monopolies to fasten their hold upon the public and crush out competition with remorseless vigor; as we have seen valuable city franchises secured for favored individuals frequently by methods utterly abhorrent both in law and morals; as we have come to realize the power which lay in the hands of railroad companies to stimulate artificially one community while it might destroy another; as the knowledge has been slowly burned into our consciousness that public service corporations were after all managed by men very human in their weaknesses, greedy for power and wealth, and no more successful in resisting temptation than the rest of mankind. Studying these corporations more closely, we have seen the newer companies—railroads, interurban electric roads, and lighting companies—being managed primarily, if not exclusively, for the benefit, not of the investors, but of those who could induce investors to invest. A new form of human pest has thus made his appearance—the promoter; and a new science of banking has made its appearance, which, I think, has not been named yet. “New”, did I say? To some of us these new friends look most uncommonly like our old acquaintances, Dick Turpin and Jack Shepard, in a fresh disguise; and the new banking has a most unseemly resemblance to the old amusement known as highway robbery. Wordsworth’s “Rob Roy” was not the first to invent that

“Good old rule—the simple plan
That they should take who have the power
And they should keep who can.”

nor has he been the last.

In this latest variation of the old game the interests of the investor and the interests of the public alike have been

overlooked; but it is all a very logical outcome of the original mistake—the theory that a public utility, once its franchise is granted by state or municipality, becomes a mere matter of private ownership.

The fundamental purpose, as I understand it, of the Public Service Commissions Law is to remedy that old mistake—to place the relations of the state, the public service corporations and the public once for all upon an open and honest footing,—one fair to all parties. All three parties are parties in interest; the public, the community of to-day, demanding fair treatment for every individual, large manufacturer or small, rich or poor alike; the public service corporation, demanding just and liberal treatment for those who are willing to invest their capital in developing a public utility; and the state, standing for the whole community in its continuing capacity from generation to generation—from now into the far distant future, and demanding that these great questions shall be considered not as of to-day—but that the decision in all matters of public policy shall take the road which leads often past the best immediate results toward the best results for the time to come. And of these interests the last is by no means the least important. “Conscience and the present constitution of things,” says Davison, “are not corresponding terms. It is conscience and the issue of things which go together.” A public service corporation is thus in reality a tripartite partnership in which the past, the present, and the future are all joined—the investor seeking security and a just return for his capital, the result of the labors and sacrifices of the past; the public, asking immediate service in the present; and the State, demanding consideration for the future.

It is the duty of the public service commissions to consider every question brought before them in the light of

these interests and to attempt to do justice to all three—to make use of the results of the past, to satisfy the just demands of the present, and to keep ever in mind the needs of the future. It is because of its endeavor to restore a proper balance to these three interests that this law marks so great a step in advance.

We have been told that, while the law gives the commissions power over future issues of stock and provides expressly that no franchise shall hereafter be capitalized, the commission should not attempt to reopen old matters—must not touch existing securities; that vested rights have been gained by the granting of franchises; that where such franchises have been capitalized they must be held inviolate; and that rates must be fixed with due regard to those vested rights. I should answer to this that a common council or a state legislature may barter away any present rights, yours or mine, of to-day; but the future is not theirs to give. They may not dispose of rights which belong to our children as much as to us, and to their children and their children's children after them. They may allow private development and management for the sake of immediate public advantage, and any such investment should be protected from unjust and unreasonable competition and must be held sacred for the investors; but the franchise itself is something which may not be given away, because it is not within the province of the legislature to give away that which does not belong to the *existing* community. A franchise granted by the legislature of fifty years ago, for instance, belonged then to us of to-day quite as much if not more than to our grandfathers who handed it over to some railroad in perpetuity; it belongs to us now as it will belong to our grandchildren in their turn. The action of the legislature of two generations ago in giving away our birthright is

not morally a binding contract upon us to-day, when it comes in conflict with present or future interest; and the vested rights of the private inheritors of that franchise will not stand when they come in conflict with the vested rights of the whole people of the State of New York.

Perhaps this blunt statement may seem "socialistic" and not to be accepted by those who fear to face plainly the conclusions which must be drawn from the premises they have helped to create; they will say that contracts are sacred by the constitution and the laws and that therefore these old franchises must stand. But the constitution will not guarantee a contract which was essentially illegal in its inception, any more than it will protect a sale of stolen goods, however innocent the seller and the purchaser; and while this view of the illegality of the old franchise contract may not be "good law" according to present decisions, it will be good law within a very short time; for the public perception of the inner essence of things has grown with surprising swiftness of late years, and the courts never lag very far behind public opinion. If it is not legally practicable to actually take back the franchises, there are other ways of reaching the same practical result which will be found and developed. The law will never stand in the way of genuine progress; some legal way will always, sooner or later, be found to do that which is morally right and which the voice of the people, when it is the voice of God, demands.

The continuing community, then, is the real owner of the franchise, and as such is entitled to its share of the profits of the public service corporation; and that share amounts to all that is left after the legitimate investor has had a liberal return on his investment, with something over to stimulate good business management. And that share should be given to the public and the State

either in the shape of direct payment for the franchise, in improved service, or in lower rates.

IV.

A few words in closing as to the practical operation of the law in New York. The commissions have been in existence only six months—and that is a short time for a revolution to be consummated; but already experience has shown the immense value of the law. Merchants and manufacturers have a powerful tribunal before which they can plead for justice and efficiency; any individual with a just complaint can have it brought to the attention of a public service corporation by the commissions far more forcibly than he himself could bring it; the issues of stocks and bonds by these corporations are for the first time subjected to rigid scrutiny, and it is safe to say that very little water will leak into such securities in the future;—in every way the rights and interests of the public are being safeguarded as never before, and the public is becoming aware of the fact. For the first time in their history these great corporations realize fully that there is a higher power above them—a power to which the public can now appeal; they have been shorn of their ability to dispense life or death to businesses, to tyrannize over individuals or to ignore the interests of the public—for above them is the state, demanding justice and fair treatment for its citizens and enabled to enforce its demands.

It is only fair to say that, on the other hand, the corporations have shown both good sense and good temper in accepting the law graciously, and doing all in their power, so far, in carrying out its provisions and the orders and requests of the commission. Hundreds of complaints made to the commission never reach the com-

missioners; the complaints are remedied by the corporations as soon as their attention is called to them. In truth, the wiser among the corporation managers see plainly that the law is their best defense against dangerous legislation; that the commission will stand as a barrier against injustice to the corporations on the one hand, while it affords relief to the public against injustice on the other.

It will lead to a safer and better condition of things all around—the public will see that its rights are safeguarded and demagogic appeals will lose their force and effectiveness; the corporations will be protected against destructive competition and blackmail and assured of a fair return on honest investment; hence should result a return of public confidence in the securities of the corporations—which ought in turn to be as good and conservative investments as any municipal bonds. There will be two classes of people, but, I think, only two, who will suffer from the law—those among the capitalists and promoters who are too greedy to be content with their fair share—who wish to reap where they have not sown; and the demagogues and agitators who will feel themselves cheated out of their best weapons of attack. But if both these classes could be put out of business entirely the public would become duly grateful.

That all these desirable things will come at once no one will expect; that they are coming and that the Public Service Commissions Law will justify the expectations of its promoter many of us fervently hope and believe. That law is upon the statute book not because a governor of New York wished to alter the law, but because public opinion justly demanded a change in existing conditions. The old footing of the public service corporations was intolerable; something new had to be substituted for the

false and outworn theory of competition in order to protect the public and the state. Governor Hughes recognized the voice of the people demanding reform, and the result was an effective piece of legislation which fairly entitles its author to be considered as that rather rare personality in American politics — a constructive statesman.

For my own part, as a Democrat I welcome a law which seems to me not only essentially democratic in principle, but as in line with frequent declarations of the party policy—an effort to root out one of the most insidious forms of special privilege and to regulate in the name of the people various monopolies which have been for many years disturbing factors in our social and political development.

PUBLIC SERVICE COMMISSIONS.

HON. WILLIAM H. HATTON.

The subject under consideration is so large that it is not possible to do more within the time allowed than to call attention to a few points, and as the purpose of a meeting of this kind is to promote discussion, we will, after making a brief general statement, notwithstanding it presents the subject in a disconnected way, take up for consideration a few of the points relating to the details of public regulation about which students of the problem differ, viz.: Valuation of public utility property, uniform accounting and publicity, franchises, state regulation and home rule, rates and classification, and court review.

One of the chief functions of the State is to provide such public utilities as are necessary for the economic and social welfare of the people.

The State has undertaken to furnish these by authorizing various corporations to engage in public service enterprises. Corporations, having engaged in the work, cannot escape the responsibility attaching thereto. They are under obligations to furnish to all persons, without discrimination, adequate facilities and service at reasonable rates.

The right of the State to control and regulate all corporations of its own creation and to prescribe the conditions under which foreign corporations may operate within the State is original and inherent; but, aside from this right of corporate control is the right of the State to control all persons engaged in a public calling and all

property which has, by reason of its use, become invested with a public interest. This is no new theory or doctrine, but it is nearly as old as the common law. The control of railways, which are but modern highways, is of the highest importance at the present time, is increasing and will continue to increase in relative importance from year to year, due to many different causes, among which are increasing intelligence and wealth, resulting in a higher standard of living, the increasing specialization of labor, which requires increased facilities to bring together the specialist and the raw material at the specially equipped factory.

There has been an enormous relative increase in manufacturing, viz., 1890—value of manufactured products, according to census, was in round numbers about \$9,000,000,000; 1900—about \$13,000,000,000, a gain of about 40 per cent. in ten years, and the percentage of gain since that time is much larger.

The concentration of manufacturing in the large factories tends to increased urban population, all of which increases the relative importance of transportation facilities. The transportation of passengers and freight has increased at a rate far in excess of the increase in population.

From 1895 to 1906 track mileage of railways in the United States increased 24 per cent.; gross earnings, 115; net earnings, 124, while the population increased only about 25 per cent.

It requires careful consideration of social and economic relations in order to appreciate the tremendous influence of public utilities and the power of the utility corporations. The value of every piece of property is affected by transportation facilities and charges. He who controls the highways and transportation facilities controls the

wealth and prosperity. A vast power is in his hands,—a power so great that he who wields it uncontrolled may control the nation.

There has been for some years, as shown by census reports, a very marked relative increase in urban population. This, together with increased intelligence and wealth, increases the demand for all kinds of urban and interurban public utilities. The increasing intelligence and enterprise of the rural population brings the telephone and the telegraph into increased use,—thus the relative importance of all public service utilities increases from year to year with the growth of civilization and the complexity of modern life.

Another matter which may be considered in connection with this subject is the fact that there is an ever-increasing demand for abstract wealth, stocks, bonds, mortgages, etc., a form of wealth which in a measure relieves the owners from the care and responsibility of tangible property, but nevertheless gives them power to exact an income therefrom. A large portion of this abstract wealth is in public utility securities.

The policy pursued in the past has enabled the promoter, the inflationist, and the speculator to water, inflate, and manipulate these securities, and in order to make them marketable, the owners have required the public to pay an excessive amount for service rendered to insure interest and dividends on watered stock, or at least to show prospect of dividends. The demand for abstract wealth has been such as to furnish a market for these securities, but they have been so manipulated that only the wealthy, who can employ experts and attorneys to investigate, have been safe in investing in them. Therefore, the result is that a large proportion of the better class of such securities has passed into the hands of the

excessively wealthy, or the idle rich, to whom such securities are attractive on account of the desire to escape the responsibility of wealth and still enjoy the income therefrom, a system which is comparable to absentee landlordism, and tending to class distinction. This class of property should be so guarded and controlled that the present manifest greed of some of the owners may not wring from the workers an unjust tribute for the benefit of the idlers.

With the proper control and regulation, all of these public utility securities can be made reasonably stable and safe, which will tend toward local ownership of these various utilities by the wage earner and small investor, people who are more directly interested in them,—a condition very much to be desired.

The necessity for efficient public regulation is evident.

The right of the State to control is clear, but, on account of the various and varying conditions under which public service enterprises exist, and are operated, it is not practicable for the legislature, owing to its large membership, its organization and procedure, designed for general legislation, rather than administration, to deal with them except in a general way. Therefore, if we are to have effective public regulation, the legislature must intrust the details to some smaller and differently organized tribunal.

Whenever an attempt has been made to confer this regulating power on the judiciary, the courts have held the act to be unconstitutional, and have declared it to be an exclusive legislative or administrative function which may be exercised through a commission. The courts have defined the law and pointed out a practicable method of exercising the power of the State.

The commissions have been established. They stand on clear legal ground. They occupy a legitimate field.

No person need offer any apology for the existence of a well-ordered commission. The apology is due from those who have neglected to provide some effective method for exercising the State's power to the end that justice may prevail.

The economic and social necessity for such a tribunal is sufficient to justify its existence. The importance of the work intrusted to it is equaled only by that of the judiciary. Not only the financial, but the social well-being of the people is involved in the question of the proper control and regulation of public service corporations.

COMMISSION.

Much depends on the personnel of the commission. So important is the work intrusted to it that it requires men of high character and broad training. It would be folly to allow partisan or personal influences to govern in the selection of the commissioners. They should be, as our judges are, beyond the control of partisans or the influence of petty political strife. Honest, broad-minded men, influenced only by the highest motives, seeking only an equitable adjustment of the relations between the public and the corporations. We must not, however, overlook the fact that weak, inefficient or corrupt men may by chance or design secure a place on the commission. Therefore, the commission should be subject to wise and discreet checks and balances so important in representative government. The law itself must be so sound, having such inherent force and such efficient executive machinery, that the work of the commission, like the work of our government, will go on, and the will of the people

will be carried out even though at times the guiding hands are weak. Otherwise the delegation of authority may be the means of defeating the will of the people rather than enforcing it.

VALUATION.

As a foundation for its work and that the commission may proceed intelligently and within its legal powers, it must know the value of the property of any public utility corporation, the acts of which are under consideration, for the courts have held that, after due consideration is given to the public rights and the value of services rendered, that the corporation is entitled to charge a rate that shall yield returns on a reasonable value of the property devoted to public use. Therefore, it may readily be seen that the commission should be required to ascertain the value, and full authority must be conferred upon it to secure from whatever source obtainable all the necessary information to enable it to arrive at the true value of each public utility plant.

The actual investment, the true physical value ascertained by competent engineers and experts employed by the commission, is the true basis for valuation. It should not, however, be understood that this is the only element to be considered, for the commission should take into consideration every element that in any way affects the value of the property considered as any operating unit, but that the commission, the courts, and the public may be enabled to pass judgment intelligently upon any matter relating to any public utility, it is absolutely necessary that the actual physical value be ascertained and made known.

If it is conceded that the nature of the business of pub-

lic service corporations is monopolistic, and that each corporation is to be protected in its investment by granting it a monopoly in its field, and the opportunity to continue indefinitely, then all of the elements which enter into the valuation of the property of competitive business enterprises, including franchises, goodwill, etc. (which have furnished such fruitful field for the operations of the promoter, the inflationist, and the stock speculator), will be affected and some of these elements will be eliminated.

Too much emphasis cannot be placed upon the matter of valuation, and especially the physical valuation, for it is essential, if we are to protect the public from excessive charges which may be made through the compulsory power of the corporation having a monopoly of the field, also that the utility corporation may be protected in the matter of returns on its investment, to which the courts have held it to be entitled.

Do not misunderstand this statement relating to returns on investment. Many hold to the theory that the corporation is entitled to charge sufficient to pay all operating expenses, interest, and other fixed charges and dividends on stock under all circumstances.

Those who take this view evidently have not fully considered what the courts have said on the subject, for the United States Supreme Court holds that each case must be considered on its merits, and due consideration must be given to the value of the services rendered, and that the rate must be just to both the public and the corporation.

In 169 U. S. 446 the Court said:

"It cannot therefore be admitted that a railroad corporation maintaining a highway under the authority of the state may fix its rates with a view solely to its own interest and ignore the rights of the public.

"But the rights of the public would be ignored if rates for transportation of persons or property on a railroad are exacted without reference to the fair value of the property used for the public or the fair value of the services rendered, but in order simply that the corporation may meet operating expenses, pay the interest on obligations, and declare dividends to stockholders.

"What the company is entitled to ask is a fair return upon the value of that which it employs for public convenience. On the other hand, what the public is entitled to demand is that no more be exacted from it for the use of a public highway than the service rendered by it is reasonably worth."

PUBLICITY AND UNIFORM ACCOUNTING.

That the commission may have a comprehensive and thorough understanding of the business of the different utility enterprises over which it has jurisdiction, it is necessary that there be adopted by all utility corporations a scientific system of accounting, prepared by experts and approved by the commission, uniform in each class, and all public utility corporations should be required to adopt and use such uniform system and be prohibited from keeping any other books than the regular public books approved by the commission.

The form of accounts is a matter of detail, but two important features should be embodied in any system that is adopted, that is: Accounts should be kept in such a way that the books will show the various items of cost per unit of product. And a depreciation fund account must be kept reasonably adjusted to its earnings and depreciation beyond the amount actually paid for renewals and maintenance be charged off from capital.

The people have a right to know all the facts relating to the finances of any and all public utility enterprises,

and a satisfactory solution of the problem will never be reached until this is conceded and provided for. A complete scientifically arranged, uniform in each class, system of reports prepared under the direction of the commission, showing in detail all financial matters which in any way affect or pertain to investment and operation, should be filed with the commission. The reports of all utility enterprises, whether operated by municipalities or private corporations, should show in detail the various items of cost per unit, such as thousand feet of gas or kilowatt of electricity.

Comparative statistical statements prepared by the commission and published in its annual report will enable the managers, whether under private or public ownership, to make comparisons that will reveal the defects in management. Under this method, each manager is measured by the most efficient as the standard.

Publicity of this kind will enable the public to intelligently pass judgment on the relative economic efficiency of private ownership and management and municipal ownership and management.

When the people have all the facts and know the truth, they will not be unreasonable in their demands.

FRANCHISES.

In order to attract capital and enlist it in public utility enterprises at minimum rates of interest and dividends, it is necessary to offer security and opportunity for permanent investment. Therefore, investments in these enterprises should be made as stable and secure as is consistent with the public interest.

Without effective public regulation, through a competent commission to which the people can appeal for relief from any unreasonable demands of public utility corpora-

tions exercising a monopoly privilege, public authorities, in order to protect the public, deem it necessary to fix a date on which franchises will expire, after which a readjustment of the relations between the public and the utility corporation may be made. The time limit in franchises introduces an unnecessary element of uncertainty into public utility enterprises, which has the effect of increasing the price the patrons are required to pay for service beyond that which can be secured if the time limit is eliminated. There should be granted indeterminate franchises, that is, a franchise which grants the utility corporation the right to continue so long as it shall furnish suitable and adequate facilities and service at reasonable rates in the territory over which its rights extend, or until such time as the municipality shall elect to exercise its option to purchase. Every franchise should reserve an option to the municipality to purchase the utility plant.

Indeterminate franchises will tend to keep the utility corporations out of politics and will go far toward relieving them from corrupt political influences, and will obviate the necessity of a sinking fund to retire existing bonds within the franchise limit, and will prevent returning to the stockholders their capital through the depreciation fund instead of using it as it should be used for maintenance.

It may readily be seen that a limited franchise may afford the utility corporation some ground for the claim frequently made that it has a right to charge sufficient for service to pay dividends and return to bondholders and stockholders the capital invested, while the corporation still owns the utility plant. Under an indeterminate franchise the only legal depreciation charge that can be made is the amount necessary to cover actual depreciation.

It requires very careful adjustment to insure an equit-

able division of the returns from public service enterprises, taking into consideration the stockholders, the employees, and the patrons, that the artisan, the scientist, and the manager may be stimulated to the highest possible efficiency and the goodwill and coöperation of the public secured.

All franchises should provide for some system of profit sharing, examples of which are the "sliding scale", which permits increased dividends when price of product is decreased. Another more equitable plan is to provide for the distribution of any surplus funds on an agreed percentage to stockholders, employees and patrons, or in lieu of specifying any definite plan the franchise may provide that any equitable plan which the commission will approve may be adopted.

With public regulation through a competent tribunal, with power to adjust all disputes and with authority to adjust rates so they shall harmonize with changed conditions, there is no good reason for fixing a time limit in public utility franchises.

STATE REGULATION AND HOME RULE.

While the state has the power to control absolutely all public service corporations, it is well to bear in mind that local municipal government is the true policy to pursue, and wise state supervision, when dealing with public utilities, situated within the corporate limits of cities, will emphasize this principle rather than ignore or override it. The initiative in all local public utility matters should remain with the local authorities. The right to review and regulate should be assumed and exercised by the state.

There is an intermediate field between absolute control and dictation by the state and absolute municipal control

and dictation by the city council. This intermediate field is the proper sphere for the activities of the state commission in regulating the public service utilities situated wholly within the limits of cities. The commission will then occupy the position of a disinterested tribunal rendering expert service, doing that which it is not practicable for the local authorities to do, such as valuation of plant, uniform accounting, reviewing and acting as arbitrator in matter of rates, and in all other disputed matters arising between the municipalities, and the public service corporations.

Thus the commission becomes an efficient aid to local control. It enlists active public interest through publicity, thus bringing to bear upon the subject the powerful controlling influence of intelligent public opinion. It renders assistance to local authorities by furnishing reliable data for use in dealing with the utility corporation direct, or in legal contest with it in the courts.

Professor John H. Gray, a recognized authority on such subjects, has said: "We cannot discuss, for want of suitable data, the economic problems connected with gas supply. We lack, completely, data for a discussion of the question now talked about so much, namely, public ownership."

Professor Frank J. Goodnow, of Columbia University, says: "The development of any science of municipal administration is rendered practically impossible because of the absence of all reliable data."

RATE REGULATION.

While there is no way of measuring it, there is no doubt but that the existence of a commission with power to review and fix rates has a very powerful restraining influence on the agents of the utility corporation when making the rates in the first instance.

To secure effective regulation the commission must have power to review on complaint or on its own motion any existing rates, practices or service, and after due notice and hearing, no *ex parte* orders to issue, if the commission finds rates unreasonable, it shall fix reasonable rates which shall be substituted for those found to be unreasonable, and must have like power over practices and service.

The commission shall make definite rates which shall be in force as soon as legally published not maximum rates. Those who question the right of the state to confer on a commission the right to fix definite rates have evidently overlooked the fact that the power of the corporation to fix rates rests solely on the authority conferred upon it by the legislature.

The likelihood of a commission composed of men not only learned in the law relating to utility corporations, but of men who are making a special study of the question, and have no personal interest in the matter at issue, as the men making the rates in the first instance had, fixing an unjust rate is very remote, and as orders of the commission are subject to court review, all interests are amply protected.

CLASSIFICATION.

The importance of freight classification must not be overlooked. The commission must have power to regulate classification, or the rate-making power will not be effective.

HEARINGS AND COURT REVIEW.

At a hearing before the commission both the complainant and the corporation shall be given full opportunity to offer testimony of every kind relating to the matter at issue.

After any such hearing, if the commission shall find the rate complained of to be unreasonable, immediate relief shall be given and the commission shall fix a reasonable rate to be substituted for the rate found to be unreasonable. The new rate must be submitted to and observed until passed on by the courts, and thereafter, unless it shall be declared by the court to be unlawful, as the rate made by the corporation was submitted to and observed until it was declared by the commission to be unreasonable.

It would be an injustice to the complainant, as well as others who are required to pay the unreasonable rate, to allow the matter to be taken to the courts upon appeal to be tried *de novo*, and allow the old rate, which has been declared to be unreasonable, to remain in force pending judicial determination.

To try the case anew in the courts, the old rate remaining in force meanwhile, and keep the complaint entangled in litigation, would not only be unjust to him, but would delay the equitable adjustment of rates by deterring others from making complaint, for the majority will submit to wrongs rather than engage in lengthy litigation with wealthy corporations.

To those who advocate this judicial procedure, we commend the words of Chief Justice Ryan found in his opinion in the Railroad cases. In the 35th Wisconsin he said:

"Their influence is so large, their capacity for resistance so formidable, their powers of oppression so various, that few private persons could litigate with them, still fewer persons would litigate with them for the little rights or the little wrongs which go so far to make up the measure of the average prosperity of life."

The complainant having won his case before the com-

mission, he should be relieved from further litigation and thereafter the state must defend the acts of the commission, for it is a matter of public concern. Therefore, let any party in interest who is dissatisfied with any order of the commission bring an action in any court of competent jurisdiction against the commission as defendant to set aside any order made by it, fixing any rate on the ground that the rate made by the commission is unlawful.

In trials before the courts, if there is offered any new material evidence or any different evidence than that offered at the hearing before the commission, the court shall stay its proceedings for fifteen days and remand the case to the commission for rehearing. This procedure prevents the withholding of material evidence at the hearing before the commission for the purpose of introducing it at the court trial, thereby securing a reversal of the order and thus discrediting the commission, and it compels the submission of all testimony to the commission for consideration before its final action.

At the hearing before the commission the question passed on was the rate made by the utility corporation, and the burden of proof was then upon the complainant, he being the plaintiff, to show by preponderance of evidence that the rate complained of was unreasonable; if he has succeeded in so doing, then in a court trial in an action brought by the utility corporation, the question will be on the rate made by the commission and the burden of proof shall then rest upon the utility corporation, it being the plaintiff, to show by a preponderance of evidence that the rate made by the commission is unlawful.

INTERSTATE COMMERCE.

The Interstate Commerce Commission has jurisdiction over railway corporations with a capitalization of more

than twelve billion dollars, based on various relative values. These corporations operate more than 220,000 miles of railways extending over a vast area of varying topography from rich valleys and fair plains to barren mountains, covering a wide range of climate, industry, and character and density of population. Considering these we can realize the magnitude of the task before it. In order to secure more prompt consideration of interstate transportation questions which arise it may be found necessary and desirable to subdivide the territory creating federal *commerce districts* after the manner of federal judicial districts.

PUBLIC SERVICE COMMISSIONS—DISCUSSION.

GEORGE B. HUDNALL: I am happy to say that we did not need the stimulus of a Jay Gould, a Vanderbilt or a Whitney to enact a public utility law in Wisconsin. There were, however, conditions existing in Wisconsin which justified the enactment of that law, and it may be interesting to notice briefly what those conditions were.

Prior to 1903, the railroads had been paying, in lieu of taxes, a percentage on their gross earnings. Through various political campaigns and before the legislature, there had been agitation for the taxation of railroads on an *ad valorem* basis. In 1903 such an act was passed. It was claimed at the time that the railroads intended shifting the added tax to the shipper, by increasing the freight rates. Governor LaFollette sent a special message to the Legislature of 1903, in addition to his general message, strongly advocating the creation of a railroad commission for the purpose, among others, of preventing the shifting of this added burden of taxation from the railroads to the public. Such a bill was then pending in the Assembly, but was defeated.

In 1904 the Republican party adopted a platform favoring a railroad commission with power to regulate freight and passenger rates. A campaign was made throughout the state,—in every assembly and senatorial district,—favoring the enactment of such a law, and every member of the legislature was elected upon the direct issue of whether we were or were not to have a railroad commission.

When the legislature met in 1905, a bill was drafted

by the Senate Committee on Railroads which was finally enacted into law, creating a railroad commission consisting of three members, to be appointed by the Governor, by and with the advice and consent of the Senate, and subject to removal by the Governor for cause. When one reads the Wisconsin act and the law subsequently passed in New York, he cannot fail to recognize the relation of parent and child between the two.

Our commissioners receive a less salary than those in New York, ours receiving an annual salary of \$5,000 each, while the salary in New York is \$15,000 per annum for each commissioner. We have succeeded in getting a first-class commission, as good, I believe, as any in the world. It is my opinion that our salaries are ample. In the East, living conditions are different, salaries are higher, which, with other conditions, probably justifies the difference in salaries in the two states.

The Wisconsin Act of 1905 gave the commission jurisdiction over railroad corporations, express companies, car companies, sleeping car companies, freight and freight line companies, and interurban street railroad companies. In 1907, under the administration of Governor Davidson, there were added to the jurisdiction of the commission, telephone, telegraph, gas, electric light, water and power companies, and also urban street car companies.

The Wisconsin commission, therefore, has jurisdiction over more utilities than has the New York commission. As the New York commissioner, Mr. Osborne, has said, their commission has no control at this time over telephone and telegraph companies; neither has it control over water companies.

The control over railroads by the New York commission is similar to ours in many respects. We have, however, several features which they have not, some funda-

mental, others possibly not. Our control over gas and electric companies is much stronger than in New York. I will endeavor, briefly, to indicate the differences in the two laws.

The Wisconsin Act provides for a valuation by the commission of *all* utilities; the New York law does not provide for any valuation. To my mind, it is highly essential in determining a rate, to ascertain first the value of the utility. The commission cannot make a rate so low that the utility cannot receive a return of at least legal interest (6 per cent.) upon the value of the utility. It is necessary, therefore, in order intelligently to determine what rate should be made, to determine first the value of the utility. Under the Act of 1907, the commission is to value only such property of the utility as is "actually used and useful for the convenience of the public". If a utility has some property which is not actually used and useful for the convenience of the public, it should not receive a return upon its value, and under the Act of 1907 the commission, in making a valuation, would not value that piece of property.

In Wisconsin a uniform system of accounting is mandatory; in New York it is permissive. In Wisconsin it is "shall"; in New York it is "may".

In addition to a mandatory uniform system of accounting, the Wisconsin Act of 1907 provides that the utility shall keep no other books of account than those prescribed or provided by the commission. There was very strenuous opposition to this feature of the law before the Legislature. That Act also provides that the commission shall audit the books of all utilities; that the utility shall render an annual balance sheet to the commission, and, when the commission so requires, the utility shall keep an adequate depreciation account. The commission shall also keep

itself informed of all new construction, extensions, and additions to the property of the public utility. The reports the utilities must furnish to the commission must show in itemized detail "the depreciation per unit, the salaries and wages separately per unit, legal expenses per unit, taxes and rentals separately per unit, the receipt from residuals, by-products, services or other sales separately per unit, the total and net cost per unit, the gross and net profit per unit, the dividends and interest per unit, surplus or reserve per unit, the prices per unit paid by consumers, and, in addition, such other items, whether of a nature similar to those hereinbefore enumerated or otherwise, as the commission may prescribe, in order to show completely and in detail the entire operation of the public utility in furnishing the unit of its product or service to the public."

These accounts and reports are, of course, open to the public and are published by the commission in their annual reports. In the published report of the commission there is to be also shown not only the *physical* value of the property, but also the value of *all* the property of the utility.

It seems to me that when you have adequately and definitely provided for a valuation of both the *physical* property and *all* the property of the utility; for a uniform system of accounting and auditing; for a depreciation, new construction, and addition account; for a complete report showing the cost, the gross and net profit, etc., per unit, and the price paid by the consumer, that you have the factors from which, by mathematical calculation, you can ascertain what is a reasonable rate; at least, that is what we tried to accomplish by the Act of 1907. This is wholly lacking in the New York law.

In Wisconsin it is provided that *all* public utilities shall

file with the commission schedules showing all their rates, while in New York it is provided that only railroads and street railroads shall file such schedules. I find no provision in the New York Act for gas and electric companies to file any schedules of rates.

In Wisconsin the rendering of any service free, or at a greater or less rate than that named in the published schedule, is punishable by a heavy fine. In New York, departures from schedules, discriminations, rebates, etc., are limited to railways and street railways. There is no such provision covering gas and electric companies; neither is it provided that discrimination shall be ground for complaint against railroads or street railroads.

In Wisconsin it is provided that *all* utilities shall furnish adequate service at reasonable rates. I find no mandatory injunction in the New York law in this regard as to gas and electric companies.

In Wisconsin any mercantile, agricultural, or manufacturing society or any body politic or municipal organization, and as to railroads, street railroads, express and telegraph companies, any person, and as to other utilities, any twenty-five persons, may make complaint that any rate is unreasonable or unjustly discriminatory, or that any service is inadequate or cannot be obtained. In New York, as to railways and street railways, only persons *aggrieved* may make complaint, and as to gas and electric companies, a municipality or certain number of *customers* may make complaint. In Wisconsin we do not limit complaint to customers or those who are aggrieved, but, on the contrary, provide that the absence of direct damage to the complainant shall not be sufficient cause to warrant the commission in dismissing the complaint.

The Wisconsin Act, unlike New York, provides that the utilities may make complaint to the commission as to

any matter affecting them, with like effect as though made by any other person against them.

If the utility does not remedy the thing complained of, here, as well as in New York, the matter is investigated by the commission. Oftentimes an investigation will develop sufficient facts to warrant the commission in believing that no hearing ought to be ordered, or it will convince the utility and the matter will be remedied without the necessity of a formal hearing.

If, however, after investigation, the commission is satisfied that a hearing should be had, they may order a hearing upon ten days' notice, and if, upon such hearing, any rate is found to be unjust, unreasonable, or discriminatory or preferential, the commission determines and declares, and by order fixes, a reasonable rate to be observed and followed in the future in lieu of that found to be unjust, unreasonable, discriminatory or preferential. In Wisconsin the commission make the *exact* rate, while in New York the commission make a *maximum* rate.

The thing that impresses me regarding the maximum rate provided by the New York law, especially as to gas and electricity, is this. The New York law not providing for any schedule of rates for gas and electricity, and not being mandatory that gas and electric companies shall furnish an adequate service at reasonable rates, and there being no penalty provided for a discrimination in such rates, I should judge a maximum rate in practice would be found to be rather inefficacious, for the reason that, after the commission has fixed a maximum rate, one customer may be charged the maximum rate, another may be charged any rate not exceeding the maximum rate, and the third may be given free service, and yet there be no violation of the law. Such a thing is impossible under the Wisconsin Act. I

notice the commissioner from New York said that they expect, in the future, to strengthen their gas and electric law in that state.

Under the Act of 1907, if the commission, after investigation, find that any rate or service is unjust, unreasonable, insufficient, discriminatory or preferential, or otherwise in violation of any of the provisions of the Act, the commission shall order the utility to pay into the State Treasury, within twenty days, the expense incurred by the commission upon such investigation.

In Wisconsin all orders of the commission go into force and become effective twenty days after they are promulgated, unless the commission shall otherwise order, and all orders of the commission are made *prima facie* lawful and reasonable.

If any utility or any person in interest is dissatisfied with any order of the commission, they may, within ninety days, begin an action in the circuit court for Dane County (the county in which the Capitol and the commission are located) against the commission as defendant, to vacate and set aside such order. There has been but one action begun to set aside an order of the commission in the two and one-half years of its existence, and the order of the commission was upheld by the courts.

No injunction shall issue suspending or staying any order of the commission except upon application to the court, notice to the commission, and hearing.

The court review, from this point on, is unique in some particulars. The Interstate Commerce commission found that railroads will not present all their evidence to the commission, but will reserve the presentation thereof in the first instance to the court. The result is that the commission have no chance of passing on all the facts, and the court oftentimes reverses the commission on

evidence which was never presented to the commission. We have, I think, effectually guarded against this practice in Wisconsin by providing that if, upon the trial of any action, "evidence shall be introduced by the plaintiff which is found by the courts to be different from that offered upon the hearing before the commission or additional thereto, the court, before proceeding to render judgment, unless the parties to such action stipulate in writing to the contrary, shall transmit a copy of such evidence to the commission and shall stay further proceedings in said action for fifteen days from the date of such transmission. Upon the receipt of such evidence, the commission shall consider the same and may alter, modify, amend or rescind its order and shall report its action thereon to said court within ten days from the receipt of such evidence. If the commission shall rescind its order complained of, the action shall be dismissed; if it shall alter, modify or amend the same, such altered, modified or amended order shall take the place of the original order complained of, and judgment shall be rendered thereon as though made by the commission in the first instance. If the original order shall not be rescinded or changed by the commission, judgment shall be rendered upon such original order."

The commission is thus placed in a position where it passes on all the testimony offered before the matter comes finally before the court for decision. This will have the effect of making every utility present to the commission, in the first instance, all the testimony it has on the subject.

It is impossible for the state to deal with franchises, stocks, bonds or other similar matters of a corporation that is not a creature of that state. To obviate this difficulty, it is provided by the Wisconsin Act of 1907 that

“no license, permit or franchise to own, operate, manage or control any plant or equipment for the production, transmission, delivery or furnishing of heat, light, water or power, shall be hereafter granted or transferred except to a corporation duly organized under the laws of the State of Wisconsin.”

It is further provided that every license, permit or franchise hereafter granted to any such public utility shall have the effect of an indeterminate permit. The term “indeterminate permit” is defined “as meaning and embracing every grant, directly or indirectly, from the state to any corporation, company, individual, association, or their lessees, trustees or receivers, of the power, right or privilege to own, operate, manage or control any plant of equipment within the state for the production, transmission, delivery or furnishing of heat, light, water or power, either directly or indirectly to or for the public, which shall continue in force until such time as the municipality shall exercise its option to purchase, as provided by the Act, or until it shall otherwise terminate according to law.”

Every indeterminate permit shall be “subject to the provision that the municipality in which the major part of its property is situated, may purchase the property of such public utility actually used and useful for the convenience of the public at any time, paying therefor just compensation, to be determined by the commission, and according to the terms and conditions fixed by the commission”.

Any public utility, being at the time a corporation under the laws of the state of Wisconsin, and operating under an existing license, permit or franchise, upon the filing at any time prior to the expiration of such license, permit or franchise, a written declaration that it surren-

ders such license, permit or franchise, shall, by operation of law, receive in lieu thereof, an indeterminate permit, as provided by the Act.

So long as a utility furnishes adequate service at reasonable rates, it should have not only the privilege of continuing in business indeterminately, but should also continue in business without competition, and the Act provides not only that these permits should be indeterminate, but that no other license, permit or franchise shall be granted in any municipality where there is in operation, under an indeterminate permit, a public utility engaged in a similar service, before first securing from the commission a declaration, after public hearing, that public convenience and necessity require such second public utility.

It is also provided by the Act of 1907 that every public utility having conduits, subways, poles, or other equipment on or over any street or highway, shall, for reasonable compensation, to be determined by the commission, permit the use of the same by any public utility, whenever public convenience and necessity require such use, and the same will not result in irreparable injury to the owner or other users of said equipment, nor in any substantial detriment to the service to be rendered by such owners and other users.

The Act also provides that any public utility may enter into any reasonable arrangement with its customers or consumers or employees for the division or distribution of its surplus profits, or for a sliding scale of charges, or any other financial device that may be practicable and advantageous to the parties interested. But no such arrangement or device shall be lawful until it shall be found by the commission to be reasonable and just and not inconsistent with the provisions of the Act, and shall

always be under the supervision and regulation of the commission.

Believing that as much power should be left with the municipal councils as possible, it is provided that every municipal council shall have power: (1) To determine the quality and character of each kind of product or service to be furnished or rendered by any public utility within said municipality, and all other terms and conditions not inconsistent with the Act upon which such public utility may be permitted to occupy the streets, highways or other public property within such municipality; (2) to require of any public utility such additions or extensions to its physical plant within said municipality as shall be reasonable, or necessary, and to designate the location and nature thereof and the time within which they must be completed; (3) to provide for a penalty for noncompliance with the provisions of any ordinance or resolution adopted pursuant to the foregoing provision. If, however, the commission, after complaint and hearing, shall find any such contract, ordinance, or other determination made in pursuance thereof to be unreasonable, such contract, ordinance, or other determination shall be void.

These are some of the principal differences between the Wisconsin and New York acts.

JOHN H. GRAY: It is significant that one of the industries now under discussion was the subject of the first monograph published by the American Economic Association, and that the relation of the state to such industries was the topic that received most emphasis at the meeting called to effect the organization of that Association.

Less than a decade before the organization of the Association, the highest judicial tribunal of the land had

recognized the public character of the industries in question, and the consequent right to regulate prices in the public interest. The idea that they are affected with a public interest has been slow to permeate the minds of the promoters and managers of the industries. As a means of enforcing this idea on the monopolists, the public, in violation of all sound theories, has often used so-called competition as a club to bring the companies to time. Long after the courts had declared these monopolies of a public character, and as such subject to public regulation, the public, ignorantly, but honestly, attempted to maintain the public rights by limiting the length of franchises. This mistake has, so far, been a great impediment in the way of a satisfactory solution of our problem. The history of the undertakings under the limited franchise theory has been a close parallel to that in the previous period during the attempts at competing companies. All the world to-day recognizes the futility of competing companies. Advanced thinkers are not unanimous, but I will venture to predict are moving rapidly toward a unanimity of opinion that limited franchises, like competing companies, are to be justified, if at all, not as a means of regulation or as a method of obtaining, directly, adequate service on equitable terms, but as a mere club or weapon with which to force some sense of restraint, justice, and fear into the minds of those recalcitrant managers of public service corporations, upon whose beclouded intellect it has not yet dawned that they are dealing with companies in which the public has very much more at stake than the legal owners have. What we want is not a franchise limited in time, but one so handled and controlled that the *future* unearned increment goes to the public, and so drawn that the public can resume it at any time without formal forfeiting of it the moment the

company refuses to use it in a manner advantageous to the public. Such franchises are granted in the public, not the private, interest; the owners tacitly, if not formally, agree to give service on terms advantageous to the public. So soon as a company ceases to be able or willing to render the public service on these terms, the most that it can properly ask is that it receive compensation or repayment for the money actually contributed by the shareholders and then get out. In order that the companies may receive the benefit of all doubts arising from the ambiguity of their legal rights, we are willing to give them, in addition to what they have put in, the present value of their franchises, if on this basis they will fulfil their public duties. But to imply that a company should be given a *future* increment of value on a franchise, is to destroy at one blow the whole theory that the companies are public service companies, and thereby to wipe out all basis of controlling charges. For instance, to allow a street car company to charge a five-cent fare to-day to pay a fair rate of interest on its investment and also on the value of its franchise, and to let it continue to charge five cents when the city and the traffic have increased ten fold, on the ground that the franchise at the later date has increased in value till the earnings now are required to pay a fair rate of income on the value of the property and the franchise, is to reason in a circle. For the franchise is at present already capitalized to the full limit that the market recognizes any value in it. The practical question is of further increase in the value of the franchise. The value of the franchise, of course, depends on the rates permitted and actually collected. Social welfare demands, in the future, rates in all these services which will prevent any increase in the value of the franchise. The method of doing this is to put a value on the tangible property and also on the franchise,

worked out on some agreed scheme such as that of Dr. H. C. Adams. Then see that rates in the future are kept down to a point that will give no surplus above a fair rate on this fixed franchise value plus a fair rate on the investment in tangible property.

All in excess of this belongs, under the theory of regulation, to the users, and should remain in their hand at all times through compulsory reduction of rates.

It is just ten years since I had the honor of reading a paper before one of these associations on the subject of the Control of Gas Companies. In that paper I maintained that the attempts at regulation before the year 1897 had reduced the possible profits of the companies, but had not given adequate service at proper prices, while keeping the economic cost of rendering the service abnormally high: I further predicted, that "no regulating act beneficial to the public can be passed without the consent of the gas companies, nor can it be enforced without their coöperation". This was meant as a gentle hint to the public to use various kinds of clubs to drive respect for human rights, and some recognition of their own social obligations, into the minds of the promoters and managers of public service corporations. The world has moved at a swift pace, and over vast stretches of the then unexplored universe, within the intervening ten years. The more intelligent and notably the younger owners and managers have seen a great light. Such managers really want and are willing now to consent to many things to which they were violently opposed even ten years ago. They have recognized once for all that it is expedient to make formal acknowledgment at least of the public character of the industries. But while making such public profession, they have been fertile in inventing and causing to pass into law, in many instances, schemes of so-called

regulation whose chief object was to prevent actual regulation, and to permit the companies to be run exactly as if the public had no interest in them.

The most powerful single influence tending to make the companies willing to submit to real regulation has been the agitation for public ownership. The necessary and logical inference from the recognition of the monopolistic character and the public interest of the service has been the alternative of regulating more effectively private ownership, or of passing to public ownership and management. It is not too much to say that, among all the influences exerted against the companies, the agitation for public ownership has been far and away the most powerful. During all this beneficent agitation, the municipalizers have been blissfully ignorant of the fact that, in the existing circumstances, the evils against which they are striving are quite as sure to crop out in public as in private ownership, unless the public ownership is subject to some administrative control by a force apart from the city government. The world has, indeed, moved since a distinguished president of the American Economic Association wrote (Hadley, *Railroad Transportation*, page 54): "A great many favor limitation of railroad construction. Whether this can ever be effectively carried out is more than questionable. . . . It is not easy to introduce a principle so foreign to the general tendency of our laws; and it may be questioned whether any advantages gained at one point would not be dearly purchased at another."

Let us hope that this will prove the last utterance by a man of scientific standing supporting the view that our public service industries are private affairs, from which the state should withhold its hand. Surely, all agree to-day that there can be no control of public services,

until the public has the right to prevent unnecessary investment. Certainly, the scientific world in the intervening twenty years has decided that these industries should be monopolies. Upon this decision alone rests the right to regulate. There can be no such a thing as a fair return upon investments in this field if the capital honestly invested may be raided by so-called competing companies at will, thus duplicating the capital by unnecessary investment on which a fair return is then claimed in rate controversies.

It marked an epoch in dealing with public service companies, when the commission on public ownership of the National Civic Federation—a commission representing every phase of belief, affiliation and interest—declared in its final report, with but one dissenting voice, that the solution of the problem required that each community should have full right and power to take these industries into public ownership and management, at any time when the public interest could not be otherwise maintained. When the constitutional, statutory, and financial authorities for such action are fully established throughout the land, the opposition to effective control has no leg left on which to stand. The right to purchase by voluntary agreement and to operate, and the right to expropriate on the part of the public, is the greatest power of control to hold the companies to their duties. It is the right to compel and to control without limit. The power to take the life of a company, and also its property at a fair price, is the power to make the company the servant, not the master, of the public. Anything short of this, under present American conditions, falls short of effectiveness. The new Wisconsin law rests on this principle, while the New York law is defective at this point.

May we not justly hope that, after a generation of

warfare in this matter, the year 1907 has ushered us into a new era of peace in these industries, in the sense that perpetual use of clubs, hammering and warfare—conditions the burdens of which always fall upon the public, and which always raise the economic cost of service—may give way to an open, frank, and sincere acknowledgment on the part of the owners and promoters of these services that the services are public in their nature, and that, therefore, they must be adequately controlled by the public. If such prove not to be the case, and that right speedily, the undertakings not only will pass over into public ownership and management, but human progress requires that they should so pass. Let us hope that this changed attitude on the part of the companies may come and may so pacify the people that the public, whether represented at the polls, in the legislature and city council, the executive mansion, or embodied in controlling commissions, may lose some of its instinct for warfare, blood and destruction, and may be willing to coöperate with the private interests involved to give the owner of the private industry a guarantee of an opportunity to earn a fair return, in view of the risk, upon the money actually and necessarily invested in these enterprises.

The most significant attempts at regulation in the last generation have been embodied in the interstate commerce acts (acts which have not yet reached the legal age of twenty-one years), the railroad commission acts of Massachusetts dating from 1869, the Massachusetts Gas and Electric Light Commission acts dating from 1885, and the more recent commission acts relating to gas in New York and the amended railroad commission act of Wisconsin. To these ought to be added the National Banking act (older than any of those previously named). Although this act does not relate to what under our law

is a public service, the principle involved is so closely assimilated with the principle of the regulation of public utilities as to justify the mention of it in this connection. No one of these attempts at regulation, varied as they have been, has been without great value. Each of them, in its own way, has been of vital importance in educating, not only the consumer and the investor, but also the legislators and the managers of the private companies as well. If these various efforts be viewed, by and large, they will all be recognized as beneficial, and yet they have all fallen far short of the results which must be attained before regulation can be said to have accomplished its object in giving adequate and efficient service at proper rates. This is not to say that the legislation in regard to these commissions, and the acts of the commissions themselves, were not on the whole wise and pointed in the right direction. It is simply a recognition of the fact that human progress is slow, and that a step of one kind may be absolutely necessary as a preliminary before a much wider step in the right direction becomes possible. As well criticize the steps of a two-year-old child, because they are not equal in length and steadiness to the steps of a vigorous adult man, as to condemn these commissions because they have not accomplished what it was impossible for them to accomplish under the then existing circumstances, although many of those things may prove to be possible of accomplishment under the legislation in regard to public utilities, enacted by the legislatures in Wisconsin and New York in 1907.

Let us summarize very briefly some of the essentials of regulation and then turn our attention to a summary comparison of the public utilities act of 1907 for Wisconsin and New York, to see their relative significance when measured alongside of these fundamentals. Before mak-

ing the comparison, it ought to be remarked, parenthetically, that the principles of control of privately owned monopoly by a power entirely distinct, not only from the owners and managers, but also from the consumers of the company, apply with equal force to the regulation of publicly owned monopoly.

First, then, if regulation is to be successful, there must be a uniform system of accounts, records, and reports for like services in each of the states. This point involves, also, actual and frequent public auditing, and a real publicity not only of the auditing, but of the accounts. This implies the acknowledgment, to a greater extent than has yet been attained on the part of the owners, that these industries are of so public a nature that the public has the right to know every detail of the organization, financing, and management of the undertakings, to as full an extent as it has the right to know in regard to the management of the public schools or the health department of a city. There is, and there can be, no effective regulation until the companies are compelled or induced to act in good faith on this principle, and until the controlling organs of the state have money enough and experts enough to put this principle into effective operation. Nor can the idea be made effective in practice until the organ of the state which has supervision of these industries has financial resources enough, and employs a sufficient number of professional accountants and auditors, to keep the facts of these industries in an intelligent form before the city council, the legislature, and the consuming public. The accounts and the results of the auditing must not only be public, but they must be published, and actually brought before the voting portion of the public in such a manner as to enable the laymen to understand and compare them for the same company year by year, and also with other

companies. Of course, with this degree of publicity, the companies must in justice be protected and be permitted to protect themselves from competition by trade and traffic agreements (subject, of course, to approval by public authority and also made public). The rule must work both ways. This brings us to the same point again, namely, the recognition of the public character of the services.

The Massachusetts commissions already referred to, and the Interstate Commerce Commission, have had nominal power to do a large part of the work of control within this field, but, unfortunately, at no time have they had the funds, or any expectation of obtaining the funds within a reasonable number of years, to employ a sufficiently large and sufficiently permanent staff, to do this work satisfactorily. What is true of the auditing, accounting, and reporting is equally true of the engineering. Real control can never be obtained until the commission has constitutional, statutory, and financial power to organize, maintain, and direct a more adequate and effective engineering force in the field of each industry under the control of the commission, than is maintained by the largest and strongest company. When the whole world knows and understands the conditions of the industries through the work of the accountants and the engineers, we have made some real approach toward the regulation of prices, and we have come nearer to the solution of that vexed problem, the taxation of public service corporations. Here it is that we come to the first great technical difference between the public service commissions of New York and of Wisconsin.

Under the legislation of 1907, each of these commissions is nominally given unlimited power to inspect, to investigate, and to fix the price of services, within the

constitutional requirements, regarding due process of law, and just compensation, to be determined by judicial authority. Almost every provision that ingenuity can invent seems to have been inserted in both acts to prevent the courts from interfering unduly with the work or orders of the commissioners, and to prevent the companies from using the courts to stay orders of the commission pending a decision on their legality. The relation of the New York commission to the courts seems to be somewhat more promising than that of Wisconsin.

In the matter of rate regulation we have come face to face with the fact of capitalization, stock watering, and franchise values. As I have so often said in the last twenty years, proper consideration of the equities in the case of innocent holders and a due respect for the untold legions of widows and orphans involved in the controversy, as well as every consideration of mere expedience, requires that the stock watering of the past, so far as it is reflected in the market values of securities and in the present earnings of companies, and so far as it has been recognized as legal up to the present time, should be accepted on the ground that both the public and the companies have responsibilities for existing conditions. But, as previously stated, all *future* increment in the value of the franchises should be prevented by rate reductions or improvement in the service. The Wisconsin law has recognized a principle which heretofore has been but little regarded, although it is emphasized in the new Virginia constitution and the legislation resting upon it, namely, that whatever the specific legal terms or length of existing franchises may be, they have but little actual value in a growing community. A perpetual franchise to operate a street car line over a few miles of line only, in a growing city, has no practical value, for the reason

that additional franchises become absolutely essential at very frequent intervals to the life of the company. The state, therefore, finds itself almost everywhere with an actual right of amending franchises where no legal right exists, for to refuse a great company the powers necessary to enable it to meet the expanding needs of the community, is virtually to abolish the existing franchise, for this right to refuse amendments can be used by the legislature to obtain from the company a waiver of any rights considered injurious to the public. This enables the state to bring every corporation in all details under the provisions of an act establishing control according to the prevailing idea of justice at the present time.

The Wisconsin law has provided for this, but the control of rates rests on the idea that the owners of the enterprises are entitled to charge rates which will give them a fair return upon the capital actually and necessarily invested to render the service. This implies, of course, that the capital is not only honestly invested and managed, but is managed with a reasonable degree of skill and efficiency.

The sequel will probably prove that the most important step yet taken in America, in the field of regulating public service corporations, is to be found in the provisions of the Wisconsin law compelling the uniform accounting, auditing, and publicity, together with the requirement of the valuation of the physical assets. This provision for valuing the property is not, as the companies seemed to believe before the act was passed, an attempt to squeeze the existing water out of capitalization, or to destroy the value of the existing franchise. It is a mere step, and a necessary one, to determine the value of the existing property and franchises and to obtain the other necessary information without which the right to regulate prices

has no basis in equity, but degenerates into the old idea of a club or weapon with which to punish the companies. This provision may properly be regarded as an attempt to seize the *future (not the existing)* unearned increment on the franchise for the public. It leaves the existing value of the concern, including the capitalized value of the franchise, in the hands of the present holders. Any proposition short of this really destroys the foundation for regulating prices, and throws us back on the old idea that the companies are really private companies. In fact, to shut off the valuation of the physical assets is to hurl us back into the era of so-called competition, with all of its corruption. But these companies are really public. They are logically monopolies. From these two facts it follows that they ought to have their prices regulated. There can be no just ground, in an age of reason and intelligence, for permitting private owners to own, capitalize, and exploit forever the constantly growing value of these public franchises. It is the height of folly to advocate any rate regulation without a valuation of the physical property. It may be in some cases that the franchise furnishes the chief item of property, but the chief claim to compensation by the private owners must rest in the future on their contributions of capital. Until the amount of that is determined, of course, it is utterly impossible to determine the value of the franchise. For the combined value of the two is determined largely by the earnings. This total value cannot be analyzed or separated into its component parts without valuation of the physical property. The forces acting upon the value of a franchise are different in origin, direction, and effect from those acting on the value of the physical property. The one kind of value decreases by time and decay, the other increases with every step in human progress. The

only justification for allowing any financial return to the franchise of a public service company rests on the historical fact that such companies, before the public knew that they were of a public nature, were allowed to charge prices for the service which paid what was considered a fair return on the capital actually invested, and, in addition, furnished the basis for a high value of the franchise. Then the companies were permitted to issue capitalization against this value, and even to make false declarations as to the amount of such earnings, and thereby base excessive amounts of their watered capitalization on this surplus, and then palm such securities off on the innocent investor, the widow and the orphan, from whom protection is now claimed. Every element of value, tangible and intangible, ought to be taken into consideration in fixing the present value, both for taxation and the fixing of rates; but, as already indicated, the basis and starting point of all valuation for these purposes is the valuation of the physical property; without that, no scientific progress can be made.

In the two fundamental requisites of effective regulation, uniform accounting, together with public auditing, and the valuation of the tangible property, the Wisconsin law seems immensely superior to that of New York. I should say that the most hopeful feature of the New York law has nothing to do with the formal powers conferred upon the commission, but relates rather to the fact that, so nearly as may be under a constitutional government, the commission has placed at its service unlimited funds with formal authority of so broad and autonomous a nature conferred upon the commission, that it may, if it pleases, establish uniform accounting, auditing, and reporting; organize and maintain whatever staff of engineers, accountants, librarians, statisticians, and other

experts seems necessary, and may, if it chooses, beyond doubt, establish a physical valuation of the plants. Until the law is changed, that commission seems much less likely to be hampered from lack of funds than the Wisconsin commission. The practical danger in New York is that the commission will be swamped with what seem pressing demands upon its time and energies, and will involve itself in an untenable position in an attempt to prevent stock watering by passing upon petitions for the issue of stocks and bonds. Petitions of this sort may easily be made to occupy the major portion of the time of the commission to the exclusion of more important matters. The practical way to prevent stock watering, is to value the physical property of the company and fix the value of the franchise at the same time. This will check stock watering by making it utterly useless.

All previous attempts at regulation, state and federal, have been shipwrecked after accomplishing relatively little, by the inadequacy of the appropriations placed at their disposal. Let us hope that the reorganized Interstate Commerce Commission of 1906, and the public utilities commissions of New York and Wisconsin, will be able, even under the pressure of an impetuous and somewhat uneducated public opinion, to accomplish such a degree of success as will once and for all convince the public that all human government, in as complex affairs as these commissions are required to deal with, is a scientific matter, requiring expert knowledge, both of a higher degree and also of a much larger mass than has heretofore been recognized, and that these can be obtained only by large expenditures of money, and expenditures, too, on a very much larger scale than the public has heretofore deemed necessary.

In this respect the New York commissions (and nota-

bly that of the first district) are much more interesting experiments than that in Wisconsin. The problems in the first district of New York are, unfortunately, more dynamic at present and more consciously pressing for solution. Fortunately, the people begin to realize that vast sums of money are required for their solution. It is an inspiring sight, therefore, to see the resources of that district placed so much more largely than in any instance heretofore in America at the disposition of the public service commission. Every well-wisher of America, and every man who has come to realize that unregulated private monopoly in important public service is intolerable and unendurable ought to rejoice at the experiments now going on both in Wisconsin and New York, and to recognize them as probably the most important experiments in human government yet undertaken in America. Not least of all should he rejoice in the high character of the commissioners, and in the fact that, coupled with large legal powers, these commissions, especially in New York (first district), have adequate funds placed at their service to enable them to carry on their work. Let us all pray that public sentiment may so far be held in check as to give these commissions, substantially on the present basis, a considerable number of years to wrestle with this problem before their powers are greatly curtailed, or possibly destroyed by further and hostile legislation. Either law is good enough to bring about marvelous progress if only it can be saved from change, or the serious fear of change, until it has a chance to show what can be done under it.

EDWARD W. BEMIS: From an extended experience in representing cities before gas commissions in Massachusetts, New York and other states, I have become thoroughly convinced on the following points:

1. It is a good thing for the country to have the experience that the New York and Wisconsin public service commissions are furnishing.

2. It would be very unfortunate for most states to follow suit in the near future.

3. One reason for this is the denial of home rule in such legislation. It is all right for cities to be restricted by state legislation in the length of life of franchise grants and in some other respects, but fundamental decisions should rest with the people without any fear of veto by the state commission.

4. Municipal ownership is sure to be checked by such a commission, which invariably is hostile to the movement and is inclined to favor existing companies.

5. The theory of commission control would stand in the way of squeezing out franchise values preparatory to city purchase save as efforts at regulation or taxation might be made. Such efforts, however, are usually much restricted by the courts. The far more effective method of direct city competition or the threat of it, or indirect competition through a holding company as is being so successfully tried in Cleveland, would be practically impossible under a commission scheme.

6. Any attempt at appraisal of physical property is almost sure to err against the public and on the side of 10 per cent. to 30 per cent. of excess above the proper amount.

7. Most states would not secure such good commissions as New York and Wisconsin, where exceptional conditions appear to have favored the appointment of unusually public spirited men, independent of corporation control.

GEORGE E. HOOKER: It should perhaps be remembered that the franchise value spoken of by Prof. Gray, in his

chivalric championship of "the widows and orphans," is not only very uncertain and speculative in amount, but is often subject to reduction or effacement in certain wholly legal ways, so that it may not really be a vested right.

In the traction settlement ordinances recently adopted in Chicago a certain allowance for the value of unexpired franchises was made, largely on the basis of the profits then being realized from the then existing service and fares. That service, however, was bad, the fares charged were too high for the service rendered, and Chicago then had the power to regulate car fares. The City might presumably have reduced the fares, therefore, if it had chosen so to do, until it had lessened or perhaps practically wiped out profits above the interest charges on the actual capital investment. The city had the power thus to cut down, if not practically to obliterate, the franchise values. The criticism provoked by the allowance for franchise values in these renewal ordinances was, therefore, not without reason.

Franchise values can also be reduced, or wiped out, where the company lacks a monopoly, by the introduction of competing lines, especially with lower fares. Cleveland, as I am informed, lacks the power to regulate fares, but Cleveland is having a three cent fare company build and operate competing lines, and is thus rapidly squeezing the water out of the stock of the old company. It is wiping out franchise values.

In so far as franchise values are thus subject to being reduced or eliminated by perfectly legal means, their recognition as a vested interest would seem therefore to be open to question.

If a definite and certain basis on which to calculate franchise values be sought, a basis which shall not be subject to possible reduction by the legal methods men-

tioned above, it may be that the only basis of that sort would be found to be a rate of income merely sufficient to secure, under reasonable conditions, the tender of the requisite capital by the public for carrying on the street railways in question—and in that case franchise values would tend toward zero. In other words, franchise values are often largely a gamble on the probabilities or improbabilities of legal regulation or competition.

ALLEN R. FOOTE: I became a member of this Association seventeen years ago this week. At that time its annual meeting was held in the City of Washington. On that occasion Professor Henry C. Adams submitted a very able paper under the title of "Statistics as a Means of Preventing Abuses By Corporations."

In the course of a few remarks made on the subject of Professor Adam's paper, I said that I held his paper in high esteem because I believed in statistics as a means of preventing the abuse of corporations.

I then said that in my opinion the most valuable service this Association could render to the people at that time would be for it to appoint a committee to formulate a system of accounts to be kept by all public service corporations with the purpose of bringing into view every economic factor. That such a system should classify the items of the accounts into proper divisions under appropriate headings and that it should be made certain that every item was correctly entered in the division to which it was assigned and under its appropriate heading.

Having such a system of accounts, we could determine the direct profit or loss resulting from the ownership and operation of any utility and could then intelligently award the contract for supplying the service to a public or private corporation—whichever it was shown would produce the best economic results for the people.

Today, in two or three states, we have public utility commissions authorized by law to devise such a system of accounts to be kept by all of the public utilities operating in the several states, and the Inter-State Commerce Commission is authorized to prescribe the system of accounts to be used by public service corporations doing an inter-state commerce business.

It is now the duty of this Association to examine the system of accounts prescribed by these commissions and to see that they are properly devised to bring into view every economic factor. When public service corporations keep their accounts as prescribed by the commission under whose supervision they operate, when their charges for services rendered are approved or prescribed by such commission and all of their service rules and recommendations are submitted to the inspection and approval of such commission, the time has arrived when this Association should definitely declare that public policy requires that no utility shall be transferred from private to public ownership excepting it be for clearly defined economic reasons.

M. S. DUDGEON: Some of the remarks made by speakers who have preceded me indicate that they interpret the Wisconsin public utilities law as giving to the utilities additional rights to appeal to the courts to test or set aside rates made by the commission. A careful examination of the law will I think show them that they are in error. The higher courts both state and federal have repeatedly held that the public utilities have the absolute right under the federal constitution to appeal to the courts to set aside a commission-made rate on the ground that it is confiscatory. The Wisconsin law under these decisions is compelled to recognize and of course

does recognize these rights. Recognizing these rights the framers have made an evident effort so to limit the rights of recourse to the courts as to prevent it from being used for dilatory purposes.

The Wisconsin law makes the commission-made rate as binding as it constitutionally can. It declares the commission-made rate to be *prima facie* reasonable and valid, thus shifting to the attacking public utility the full burden of proving the commission-made rate to be confiscatory. This is as far as a statute can go. It will be remembered that in a railroad case the supreme court of the United States found that a statute of Minnesota which sought to make a legislative rate *conclusively* reasonable and valid was unconstitutional in that particular. The Wisconsin law also provides that all commission-made rates shall go into immediate effect pending an appeal to the courts, and forbids an injunctive order enjoining the operation of the rate except on notice to the commission and after full hearing. The law also provides for speedy joining of issue in suits brought by the utilities, requires speedy trial, and gives suits involving the validity of rates priority over all other actions. The law also shuts off delayed appeals to the courts by a provision requiring all such appeals to be made within ninety days after the order of the commission is entered. This is probably as short a statute of limitation as would be sustained as constitutional.

Compelled as they were to recognize the right that the utilities had to appeal to the court it is evident that it was the purpose of the framers of the law not to extend the right, but so to limit and regulate the exercise of the right as to prevent it from being made an instrument of delay.

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CHICAGO TRACTION

A Study of the Efforts

of the

Public to Secure Good Service

by

RALPH E. HEILMAN, A.M.

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INTRODUCTION

But few matters are more vital to a large city than its street railway system. A realization of the social and economic importance of street railways, has, in the last two decades, directed public attention to the problem of urban transportation. This interest has manifested itself in the constant demands of the public for an improved service, as opposed to the promotion of private ends by the companies. That this awakening of the public mind is not merely a transitory interest is shown by the general discussions which have been called forth concerning the relations between municipalities and street railway companies. This paper is contributed to the general discussion as a strictly local study of traction affairs in Chicago.

To a student of urban transportation, Chicago offers many features of special interest.

The length of its street railways is greater than that of any other city in the world.

Though spread over an enormous expanse, the retail or down-town district is confined within a region less than two miles square, the primal cause for this condition being the division of the city into a South, a West, and a North Side, by the Chicago River and its branches, the commercial center being the extreme north end of the South Side. Because of this natural separation of the city, divisional operation has been practiced in Chicago as in no other large city.

It is in Chicago that the municipal ownership propaganda has asserted itself more boldly than in any other American city.

Chicago transportation has been rendered an object of widespread interest throughout the country, not because of its efficiency, but because of the intermittent agitation concerning it ever since 1865. The traction situation, in its various phases, has furnished the issue for several heated municipal elections, and, indeed, has not been without its influence in state elections. Even in the city election, held April 2, 1907, the so-called "Settlement Ordinances" furnished the issue for a bitterly contested campaign.

The three elevated railways, together with the suburban trains of some of the steam roads, are constantly becoming of more importance in local transportation. However, inasmuch as all these roads are operating under long term franchises which will not expire for many years, are on relatively peaceful terms with the public, and are but a small factor in the general problem of local transportation, as compared with the street railways,—this study has been confined strictly to a consideration of the street railways of the city. But little study has been made, in this paper, of the financial operations of the companies, by which the values of street railway stocks have been enormously inflated, for the manipulations of the Chicago companies are believed to be but typical of the operations of public service corporations in many places, whereas the service afforded has been much less efficient than that rendered in most cities. Believing that the public of Chicago has always been most interested in securing a first class street railway service, more especial attention has been given to the relations existing between the city and the companies, and the various efforts of the city to secure an improved service.¹

¹ The writer is indebted to Dr. Maurice F. Doty, Special Traction Commissioner for the city, and to J. G. Grossberg, who was attorney for the city in its prosecution of the companies, for valuable sugges-

tions. He is also indebted to the Arnold Engineering Company for permission to use the books of the Traction Valuation Commission.

And finally, thanks are due to the Northwestern University, which has given to him the privilege of preparing this work under the direction of Dr. John H. Gray, who has spared no effort to provide all available material upon the subject, and for whose helpful instruction and kindly guidance the author has naught but the deepest gratitude.

PART I.

CHAPTER I.

EARLY ORDINANCES.

The first grant given by the city for a street railway, was the horse railroad charter granted to Roswell B. Mason and Charles B. Phillips on March 4, 1856, but no lines were constructed under this grant.

The first franchise under which any street railways were constructed was passed on August 17, 1858, by which Henry Fuller, Franklin Parmalee and Liberty Biglow were authorized to construct and operate street railways in certain streets of the South and West divisions of the city. This ordinance was granted for twenty-five years, and until purchased by the city.

A dispute had arisen as to the power of the City to grant the use of the streets for street railways, and on February 14, 1859, the grantees under the ordinance of August 16, 1858, together with Henry A. Gage, secured from the legislature for a period of twenty-five years, a charter for the Chicago City Railway Company. This act authorized the construction and operation of street railways upon such streets in the South and West division, as the city council had previously granted to the incorporators, or as it might thereafter grant to the company, and upon such terms as the council might prescribe.

By the same act William B. Ogden, John B. Turner, Charles V. Dyer, James H. Rees, and Valentine C. Turner became the incorporators of the North Chicago City Railway Company. This Company was incorporated for the same period and was authorized to construct

and operate street railways in the North division of the city, in such streets and upon such conditions as the council might prescribe.

On the 21st of February, 1861, the Chicago West Division Railway Company was incorporated for a period of twenty-five years,—Nathanial P. Wilder, Edward B. Ward, William K. McAllister, Samuel B. Walker, James L. Wilson, and Charles B. Brown being the incorporators. On July 30, 1863, this company acquired by deed of conveyance from the Chicago City Railway Company, all its rights and privileges in the streets of the West division of the city, together with all lines and equipment being operated in that division, by the Chicago City Railway Company.

Following these grants, permission was given to the companies by ordinances, at various times, to extend their lines. The first ordinance to the North Chicago City Railway Company was given on May 23, 1859, the duration of which was stated as being "for twenty-five years and no longer." All subsequent ordinances given to this company prior to 1865, refer back to this provision, while most of the grants given to the Chicago City Railway Company and the Chicago West Division Railway Company refer back to the ordinances of August 16, 1858, which fixed the duration of franchise "for twenty-five years and until purchase by the city."

Under these grants the companies rapidly built up and extended their lines, and by 1865, each company had developed and was operating a complete railway system in its respective division of the city—the division of the city into three natural divisions by the Chicago river and its branches furnishing a basis for this territorial arrangement between the three companies, each of which exacted a separate fare. Thus early is seen the influence of the geographical element in the Chicago traction problem.

CHAPTER II.

THE NINETY-NINE YEAR ACT.

With the rapid increase in population and the corresponding growth of the city, came a pressing need for extensions in the traction service, necessitating large expenditures. Accordingly the companies began to plan to secure extensions of their franchise rights, on the ground that sufficient capital could not be obtained for the needed extensions in the service, upon franchises which were so soon to expire. In 1863, the companies succeeded in securing the passage of a measure in the legislature extending their charters to ninety-nine years. This measure was vetoed by Governor Yates. although \$100,000 was offered him to permit the bill to become a law.¹ On February 6, 1865, the companies secured the passage of an act in the legislature, known as the "Ninety-Nine Year Act," and entitled "An Act Concerning Horse Railways in Chicago." It was supposed that the effect of the act was merely to substitute the words "ninety-nine years" for the words "twenty-five years" in the previous grants, and that the purpose of the act was to extend all the existing privileges of the companies for a period of ninety-nine years.

The most vital provision of this act was the clause which provides that the grants given in 1859 to the Chicago City Railway Company and the North Chicago City Railway Company; and the grant given to the Chicago

¹ John H. Hamline, in a hearing before Gov. Yates, Jr., on the Mueller Bill in 1903, made this statement, offering the signature of the elder Yates as authority. "A Prophecy and its Fulfillment", Hamline, p. 4.

West Division Railway Company in 1861 "be, and the same hereby are amended, as that all words in said respective sections after the words 'Company' therein respectively, shall be and read as follows viz: For ninety-nine years, with all the powers and authority hereinafter expressed, and pertaining to corporations for the purposes hereinafter mentioned."

Great popular feeling was manifested in opposition to this act, upon the grounds that it extended all the franchise rights of the companies for ninety-nine years, the Chicago newspapers leading in the attack, prominent among them being the *Tribune*.²

Governor Oglesby, in vetoing the bill, gave as his first reason for so doing: "I do not approve the bill, because by its first section it extends the franchise vested by the first section of the act of February 14, 1859, and February 21, 1861, to a period of ninety-nine years. . . . Upon any fair construction the act seems hardly susceptible of any other meaning. I have heard none other claimed for it." In his message, Governor Oglesby also based his veto upon the grounds that it was unwise to pass the act in spite of the protest of so many citizens, and so long in advance of the expiration of the existing franchises of the companies, that it destroyed the right of the city to purchase in twenty-five years as provided in the original charter, and that such an extension of franchise privileges would tend to make the street railways more monopolistic in character. The act was passed over the Governor's veto by a vote of 55 to 22 in the House, and 18 to 5 in the Senate.³ The use of corruption and bribery

² See *Chicago Tribune* files for month of Jan., 1865.

³ *House and Senate Journals*, 1865, for House Bill No. 66. Henry Demarest Lloyd in "The Chicago Traction Question" is mistaken in saying that the act was shortly afterwards repealed.

in securing the passage of this act was openly charged against the companies. A protest against this act, demanding that the law be submitted to the people, was signed by 9,000 citizens.⁴ Many public meetings were held which denounced the bill.⁵ A committee⁶ of prominent citizens went to Springfield to protest against the bill. The Chicago Board of Trade passed a resolution saying that the bill sacrificed "not only the rights of the present, but of our children, and our children's children."⁷ It would seem that for many years after the passage of the act, it was quite generally thought to extend all the privileges of the companies for ninety-nine years; for in his message to the city council on August 6, 1883, Mayor Carter Harrison, Sr., said: "No one can be more impressed with the enormity of the injustice attempted to be perpetrated upon this city by the General Assembly of the State by the act of 1865. I have always entered upon the discussion of that act with all my prejudices arrayed against it. But I am forced to yield to the opinion of lawyers far abler than myself that the act of 1865 is valid." The fact that 9,000 citizens signed a protest against this measure on the assumption that it extended the franchise rights of the companies for this long period, that the newspapers based their attack against the measure upon similar grounds, that Governor Oglesby vetoed the bill firm in the belief "that the only fair construction of this act" was the extension of the privileges for ninety-nine years, and, that Mayor Harrison's message in 1883 did not presume to deny the extension

⁴This petition was presented in the House by Representative George Strong, but was laid upon the table.

⁵The two largest meetings were at the Metropolitan Hall on January 24, and at Bryan Hall, on January 28.

⁶Mr. Wirt Dexter acted as chairman of this committee.

⁷Lloyd, "Chicago Traction Question", p. 12.

of the privileges of the companies by this act, seem to demonstrate,—regardless of the purpose of those who secured the passage of this act,—that the popular impression at the time of its passage and afterwards, was that the lives of the North Chicago City Railway Company, and the Chicago West Division Railway Company, and the Chicago City Railway Company, together with all the franchise privileges of these companies, had been extended for ninety-nine years from the date of their organization.

CHAPTER III.

CITY SEEKS TO PREVENT FUTURE LONG TERM FRANCHISES.

The violent public protest against the "Ninety-Nine Year Act," and the general animosity to long term grants aroused by the passage of that act, were largely responsible for forcing the State to adopt the principle of local control concerning street railways. In the new constitution, adopted by the State of Illinois in 1870, the power of granting franchises without the consent of local authorities was withdrawn from the legislature. The constitution provides,¹ "no law shall be passed by any general assembly granting the right to construct and operate a street railway in any town, city, or village, without requiring the consent of the local authorities having control of the street or highway proposed to be occupied by such a street railroad". In 1874 the legislature passed the "House and Dummy Act" which limited the length for which franchises could be granted by any city council to any street railway, to twenty years,—thus making short term grants a permanent feature of State policy. On April 23, 1875, the city of Chicago was incorporated by a new charter, under the "City and Village Act", which act provided that cities becoming chartered under it were forbidden to grant street railway franchises for a longer period than twenty years. Thus it would seem that the city became thrice-fortified against the possibility of any long term franchises being given to the companies, in the future. Later events, however, show that the companies were not to be so easily discouraged in their efforts to secure such grants.

¹ Section 22.

CHAPTER IV.

THE EXTENSION OF LICENSE ORDINANCES IN 1883.

The early ordinances had contained no requirements from the companies in the way of compensation to the city, aside from provisions concerning the maintenance of tracks, grading, pavement, etc. On March 18, 1878, the council had passed an ordinance requiring the companies to pay \$50 per annum on each car owned. No money was ever collected under this ordinance, as the companies contested the right of the city to levy this tax, and while the litigation was still pending, the blanket ordinances of 1883 were passed.

The original grants given to the companies for a period of twenty-five years were about to expire in 1883 and 1884, and shortly preceding the expiration of these grants, a question arose as to the effect of the Ninety-Nine Year Act upon the original grants, as well as the question of the power of the city to levy the car tax.¹

The questions in dispute at that time, as outlined by Mayor Harrison, in his message of August 6, 1883, were:²

1. "The validity of the act of the general assembly of the State, known as the Ninety-Nine Year Act, extending the rights of the street railways to operate their roads within the city.

¹ *Allerton vs. Chicago*, 6 Fed. Rep. 555 (decided in 1889). Judge Drummond, of the U. S. Circuit Court, sustained the ordinance imposing an annual \$50 car license fee, as a valid exercise of the police power of the city, under a provision in the charter of the city, whereby it was authorized to "license hackmen, omnibus drivers, cabmen, and all others pursuing like occupations, and to prescribe their compensation".

² Transcript of Record, *Blair vs. Chicago*, p. 276.

2. The right and power of the city to purchase certain railway tracks, together with other property.

3. The right of the city to impose and collect a license fee of \$50 on each car run by said companies, within the city."

The Ninety-Nine Year Act was referred by the Committee on Railroads of the city council to the corporation counsel, who in an exhaustive opinion stated his belief in the rights of the companies under the Ninety-Nine Year Act.³ In view of this opinion and other circumstances, the city was desirous of postponing any litigation concerning the validity of this act, for as Mayor Harrison in his message to the council, of August 6, 1883, said,⁴

"Hampered as are the Courts at the present time, by decisions which they consider binding upon them, I fear that were the matter to be taken before them now, the city would stand a poor show of a favorable decision. Perhaps by twenty years from now, the Courts may be so free that the city will be able to get a hearing, which today would be denied it. With these views, I am anxious to stave off a determination of the validity of the act of 1865. This present (the Extension) Ordinance leaves the whole matter in abeyance for twenty years, and is therefore favorable to the city."

The extension ordinances were adopted on July 30, 1883, and were a compromise measure between the city and the companies, providing:—

(1) That the companies should pay \$25 per annum per car, for the five years since 1878, when the original car license ordinance had been passed.

(2) That the companies were to pay a \$50 tax on each car owned by them. The number of cars owned

³ Council Proceedings, 1883-4, p. 77.

⁴ Council Proceedings, 1883-4, August 6, 1883.

was to be arrived at by a unique method—viz: the average number of car trips made daily, as certified to by an officer of each company, was to be divided by 13, on the supposition that each car made that many trips daily. The number of cars operated, as determined by this method of computation, was to be the basis of the tax.

(3) All ordinances then in force were extended for twenty years from the date of the passage of the extension ordinances, making 1903 the date of the expiration of the franchise privileges.

Later events have justified the course adopted at this time by the city. Mayor Harrison undoubtedly wrought better than he knew, in refusing to be led into any litigation concerning the Ninety-Nine Year Act. The city was in need of money, being unable to complete the erection of the city hall, because of lack of funds, and therefore would have been financially unable to fight the case properly in the courts. Had the act been tested at that time, it is possible that the decision might have been favorable to the city, but it is not unlikely that the trend of judicial decisions for the last generation, in favor of the public as opposed to corporations, had an effect in the final decision of the case.

After the passage of the extension ordinances, numerous street privileges were given to the companies which were in existence at the time of the passage of those ordinances, as well as to the companies which were formed later. Most of these franchises were made to expire with the extension ordinances in 1903, although some were given for a period of twenty years from the date when granted. Under these franchises many lines were built up in the outlying portions of the city, the extension of street railways keeping pace with the growth in population.

PART II.

ATTEMPTS OF THE COMPANIES TO SECURE LONG TERM FRANCHISES.

CHAPTER V.

THE CRAWFORD BILL.

The years between 1895 and 1900 witnessed a continued contest between the companies and the city,—the object of the companies being to gain possession of the streets for a long term period. Indeed it finally looked as though the companies had at last secured the mastery of the situation, and were about to obtain their desire. But the entire citizenship, acting with a remarkable singleness of purpose, succeeded in securing the repeal of the legislation so carefully constructed by the companies, administered a most humiliating reprimand to the representatives of the people who had acted for the companies, and forever fixed the principle of short term street railway franchises for the city of Chicago.

From the manifestations of public feeling in the past, it would seem that the companies should have realized the hoplessness of endeavoring to secure long term grants. Their privileges, under the extension ordinances, were to expire in 1903, and before the expiration of these privileges they wished to make themselves sure of a long term grant for the future. Their constant cry for long term franchises was based upon the grounds that without such a grant it would be impossible to secure the necessary capital for the proper improvement of the service. Although claiming the extension of their privileges by the

Ninety-Nine Year Act, the companies did not wish to rest their claims upon this act alone, but desired to support their claims under this act, by securing further long-grant legislation.

The first step toward securing this result, was the introduction of the Crawford Bill in the Senate, on February 6, 1895.¹ The purpose of this bill was to give to city councils the right to grant street railway franchises for ninety-nine years instead of twenty years. This bill passed both the Senate and the House, but was vetoed by Governor Altgeld, who closed his veto message with these words,

"I love Chicago and am not willing to help forge a chain which would bind her hand and foot for all time to the wheels of monopoly and leave her no chance to escape."

¹ Introduced by Charles H. Crawford, Senator from the Third Senatorial District, Cook County. Senate Bill No. 138. See Senate and House *Journals*, 1895.

CHAPTER VI.

THE HUMPHREY BILLS.

In view of the public feeling aroused in Chicago by the attempted passage of the Crawford Bill, the companies seem to have temporarily despaired of securing long term grants from the local authorities, and in 1897 a clever attempt was made to deprive the city of the power of granting street privileges. This privilege was embodied in the Humphrey bills, introduced into the Senate by John Humphrey, on February 17.¹

Of these bills, No. 148 provided for the establishment of a State Commission, consisting of three persons, appointed by the Governor, each commissioner to serve for four years. Every elevated or street railway company in the State was to make a sworn annual statement to this commission, on the first day of November. This report was to give the amount of capital stock, amount of bonded debt, value of the road-bed, rolling stock, and stations, length of tracks, amount of receipts, gross earnings, net income, operating expenses, dividends paid, amounts expended in repairs, improvements and all other expenses, the rate of fare, and operating arrangements with other roads. The commission was also to have power to regulate the time of running cars, to require suitable and comfortable cars, to provide for the heating of cars, to regulate the carrying of parcels, and to fix the maximum rate of fare—but where the fare was fixed in any existing ordinance it could not be changed before the expiration of that ordinance. Consent must also be ob-

¹ Senator from the Seventh Senatorial District.

tained from the commission before any company could obtain a new ordinance, and in the future, all ordinances were to be granted to the commission, and to be sold by the commission to the highest bidder. Power was given to the commission to prosecute any violation of this law.

Senate Bill No. 258 provided that all existing street railway franchises be extended for fifty years, dating from the first Tuesday in December of 1897, the fare in each case to be five cents for the entire period. Carriage of parcels and United States mail was authorized. No company was to be permitted to construct a street railway without securing the consent of local authorities, as required by law, and the city council was given power to grant street privileges "for any period not to exceed fifty years, upon such terms and conditions as the authorities shall deem for the best interests of the public." In return for all these privileges the companies were to make the following payments to the city:

In counties having a population of

1. Less than 100,000.....1 per cent. gross receipts
2. Less than 200,000.....2 per cent. gross receipts
3. 200,000 or more.....3 per cent. gross receipts

and at the end of fifteen years the rate was to increase to 5 per cent., and at the end of twenty years to 7 per cent., remaining at 7 per cent. until fifty years from the date of the act.

The companies put up a vigorous campaign in favor of these bills, publishing broadcast statements purporting to show that better service was secured for less money in Chicago than in any other large city, and that the companies in every other large city possessed more favorable rights and longer franchises than did the companies of Chicago. The companies, in their official circulars, also asserted that the compensation provided for

the city was much larger than that given in any other city for similar privileges. However, these bills met with great public hostility, one of the main arguments against them being the creation of a State commission to act in purely local affairs. The fact that the members of this commission were to be appointed by the Governor every four years, thus permitting politics to enter into the *personnel* of the commission, no doubt was an influential factor in defeating the bills, although the provision permitting fifty year grants was probably the one which received the most vigorous condemnation. The Chicago newspapers were nearly unanimous in their denunciation of the bills, the Civic Federation entered into an active campaign against them, and the Federation of Labor unhesitatingly denounced them. The bills were passed by the Senate on April 16th by a vote of 29 to 16. Upon the passage of the bills in the Senate, public opposition became more determined. Public mass meetings were held, denouncing the Senators who had voted for the bills.² When reported for a second reading in the House, on May 12th, the bills met defeat by a vote of 121 to 29.³

² The two largest meetings were held at Central Music Hall, April 18, at the call of the Committee of One Hundred; and the Battery D meeting, April 20, at the call of the Citizens' Association.

³ House and Senate *Journals*, 1897. Senate bills 148 and 258.

CHAPTER VII.

THE ALLEN LAW.

Following the defeat of the Humphrey bills, the companies awoke to a realization of the fact that it would be impossible for them to secure an extension of their rights in any other way than through the city itself.

In view of the strong "home rule" sentiment which had manifested itself during the campaign for the Humphrey bills, the companies decided upon the scheme of pretending to vest the city council with practically unlimited powers in street railway legislation and control. In accordance with this plan, House Bill No. 714 was introduced into the House by Mr. G. A. Allen on May 26th. The bill, which became known as the Allen law, provided that the local authorities might give street privileges to street railway companies for any period not exceeding fifty years, but all grants were to be conditional upon the consent of more than one-half of the owners of lands fronting the parts of streets to be used, although this signature once given could not be revoked. Five cents was to be the regular rate of fare, which could not be changed during the life of any existing ordinance of franchise, and in case of the extension of any existing ordinance, the rate was to be five cents for the first twenty years. For new privileges granted, the council was to fix the fare, which could not exceed five cents, but which, when once fixed, was not to be changed for twenty years. Carriage of mail was authorized, and consolidation of companies was permitted, except of parallel and competing lines. On May 28th the bill

passed the House by a vote of 85 to 60, and was at once sent to the Senate. Here many amendments were added and the bill was rushed through on the last day, June 4th, by a vote of 31 to 18. It was immediately reported to the House, where it passed by a vote of 83 to 70.¹

Immediately upon the passage of the act, Senators Walter Warden and Sidney McCloud filed a protest against the action of the Senate upon the grounds that the bill had been advanced to a second reading, when it had been read by title only upon the first reading, and that the bill had not been read at large on three different days as required by the constitution of the State of Illinois.²

As will be readily noted, the Allen law contained many provisions favorable to the companies then occupying the streets, and had the companies been able to secure street privileges for fifty years from the city council, under the provisions of this law, their position for the future would have been greatly strengthened.

On June 21, 1897, twelve days after the approval of the Allen law by Governor Tanner, John M. Harlan offered a resolution in the council providing for the creation of a special committee of five, who should investigate and obtain full and accurate information on the traction situation, and report the existing status of affairs to the city council.

The preamble of the resolution stated that the companies had recently secured the enactment of the Allen law, and would probably soon apply for a renewal of their privileges, according to the provisions of that law; "that it was essential to the interests of the people of Chicago that the mayor and city council shall be fully informed and advised as to all facts bearing upon the

¹ Only absolutely complete vote during the session.

² Senate Journal, 1897, p. 1103.

mutual relations of the city and corporations using the public streets for surface railway transportation, in order that they, the mayor and city council, may be able, when called upon, to determine, with justice to the people of Chicago and to said companies, upon what terms and by what persons, the public streets shall continue to be used for street railway purposes." The preamble further said that the people and corporate authorities of Chicago, while intending to do full justice to the companies "are resolved that any grant for the further use of the streets for railway purposes shall be made upon terms that shall fully recognize and protect the interests of the people as well as of the companies".

The resolution directed the committee "to investigate and obtain as full and accurate information as possible and report to the council the material facts" upon all important points of interest and importance regarding capitalization, earnings, dividends, franchise, and service. The resolution was passed on October 13, 1897, and the committee⁸ began work at once, filing its report on March 28, 1898. The report was an exhaustive one, covering in detail the points outlined by the resolution; the information contained therein being necessary for an intelligent understanding on the part of the council, as to the conditions then existing.

Meanwhile, from all parts of the State was coming unqualified disapproval of the Allen Law. Citizens of all parties regarded it as a clever scheme of the companies, by which they hoped to secure a perpetuation of their valuable franchise rights. The law was bitterly denounced in mass meetings and in the newspapers as one

⁸ Consisting of John M. Harlan, William Jackson, Adolphus T. Maltby, and William Maypole, with Mayor Harrison as chairman *ex-officio*, and George T. Hooker, secretary:

which had been framed and railroaded through the Legislature, in absolute contempt of public wishes, in order to enable the street railway companies to secure control of the streets for fifty years. That it was the most unpopular measure ever passed in Illinois is unquestionable.

An indication of the public indignation caused by the passage of this act, is found in the fate of the legislators who voted for the act. Cook County, in which Chicago is situated, gave 42 votes for the Allen law, of which 3 were Senators whose term held over. Of the other 39, 27 of whom were Republicans and 12 Democrats, the Republicans re-nominated 7 and the Democrats 5.⁴

The Cook County Republican Convention, on June 8, 1898, adopted this resolution:⁵ "The repeatedly changing conditions in our city render impossible the fixing of fair compensation for the granting of valuable public franchises to street railway or other private corporations for as long a term as fifty years. We, therefore, declare it to be the sense of this convention, that the so-called Allen law is in opposition to the interests of the people and should be promptly repealed." The Cook County Democratic Convention, during the same summer, said, "We declare for the prompt and unconditional repeal of this pernicious law, and demand that, pending such repeal, the city council of Chicago pass no ordinance in furtherance thereof."

However, the most conclusive proof of the public wrath aroused by the passage of this bill is found in the composition of the next legislature, which met in 1899. Of the 31 Senators who voted in favor of the Allen law, the term of 15 expired, and of these 15, but three were

⁴ *Post*, June 8, 1898.

⁵ *Times Herald*, June 9, 1898. This resolution was adopted by a vote of 875 to 246.

returned to the next session.⁶ Of the 85 members of the House who voted for the bill in its first form, but 21 were returned.⁷

Unfrightened by this public condemnation of the fifty year-grant policy, and apparently depending upon their ability to jam their legislation through the council, the companies made application to the council for an ordinance under the terms of the Allen law, on December 5, 1898, about one month after the landslide against the Allen law candidates.

This ordinance was introduced by Wm. H. Lyman,⁸ and was accompanied by a letter from the president of the roads, urging its adoption. This ordinance provided that every grant given prior to July 1, 1897, and in force on that date, be extended for fifty years. The rate of fare was to be five cents for the first twenty years. As compensation to the city there was provided a graduated rate of gross earnings per mile of single track, although there was no provision as to how the city should ascertain the gross earnings, aside from the requirement that each company should file an annual statement showing the mileage and gross earnings. On January 14, 1899,⁹ a majority report of the Committee on City Hall, to whom the ordinance had been referred, recommended that no legislation be enacted at that time. However, a minority report¹⁰ recommended the passage of the Kimball ordinance. The proposed Kimball ordinance provided for the extension of all street railway ordinances then in

⁶ Chapman, Humphrey, and Hunt.

⁷ Anderson, Allen, Branen, Brown, Bryant, Busse, Carmady, Cavanaugh, Craig, Farrel, Fuller, Grade, Johnston, McDonogh, Weavey, Olsen, Perry, Rhodes, Sherman, Sullivan, Shieman.

⁸ Of the Twenty-third Ward.

⁹ Council Proceedings, January 14, 1899.

¹⁰ Signed by Wm. C. L. Zieler and Wm. Mangler. Norton, p. 162, "Chicago Traction."

force until December 31, 1946, and that the rate of fare should be five cents for the first twenty years, but that the companies should sell six tickets for twenty-five cents, good only for certain hours of the day. The companies were to be required to pave the entire roadway of the streets occupied by them, and to pay the city a graduated rate of gross receipts for the various periods of franchise—ranging from 3 to 5 per cent. The city was to have the right to purchase the entire equipment, at an appraised value, upon the expiration of the franchise. Intense hostility was manifested against the passage of such ordinances, the agitation being led by Mayor Harrison and the local press. The ordinances were bitterly opposed and unscathingly denounced by the Tribune, Record, News, and the Times Herald, and supported by the *Inter-Ocean*¹¹ (considered as Mr. Yerkes's official organ). While these ordinances were still pending, on January 23, the council adopted a resolution saying, "Resolved, That it is the sense of the city council of the city of Chicago, representing the people of said city, who seem to be well enough nigh of one opinion on this question—

1. That the Allen law should be repealed at the earliest possible opportunity."

On March 7, 1899, the Allen law was repealed by a practically unanimous vote of the legislature, and the power of the council to grant franchises was again limited to twenty years. On March 13, the ordinances which were pending before the council were, by resolution, placed on file. The bitter denunciation of the Allen law in all parts of the State, the rebuke administered to

¹¹ The *Inter-Ocean* openly charged the other newspapers with an attempt to blackmail the companies and to secure tribute in support of the ordinances, and proclaimed that the other newspapers had promised Mayor Harrison support for re-election as Mayor, and later as Governor, in return for his efforts to defeat the ordinances.

the legislators, — regardless of their partisan connections—who were responsible for the law, and the practically unanimous repeal of the law, at the next session of the legislature, is a most striking example of the power of public sentiment, when once aroused, in shaping and controlling legislative action.

All hopes of the companies, for securing a long term franchise, either from the city or the State, were now at an end. It was evident that at the expiration of their franchises in 1903, the companies would either be compelled to enter into new negotiations with the city, accepting a franchise for twenty years, upon such conditions as might be outlined by the city council,—or to place their sole reliance upon the Ninety-Nine Year act, the validity of which had not yet been tested, and upon which alone they had never previously rested their claims.

PART III.
THE MOVEMENT FOR MUNICIPAL OWNERSHIP.....	23
CHAPTER VIII.

THE MOVEMENT FOR MUNICIPAL OWNERSHIP AND THE
PASSAGE OF THE MUELLER BILL.

The failure of the city council to exercise the power given it by the Allen law, the repeal of that law by the legislature, and the general public hostility to the companies on account of the poor service rendered, convinced the companies of the futility of endeavoring to secure further grants by the use of their former methods. The public feeling that no new franchise or renewals should be granted without adequate guarantees of good service and proper compensation to the city, and that in order to make such arrangements the public was entitled to know something concerning the financial operations of the companies—this feeling had been rapidly growing.

The companies had refused access to their books to the Harlan Committee, but perceiving the drift of public sentiment, and realizing that the public could no longer be ignored in the formulation of their plans, the six leading companies¹ agreed to open their books to a committee of the Civic Federation and under the direction of this committee² the books were carefully investigated by Ed-

¹ Chicago City Railway Company, North Chicago City Railway Company, North Chicago Street Railroad Company, Chicago Passenger Railway Company, Chicago West Division Railway Company, West Chicago Street Railroad Company.

² The officers of this committee were La Verne W. Noyes, president; John W. Ela, vice-president; W. H. Brown, secretary; Isaac N. Perry, treasurer.

mund F. Bard, an expert accountant. The examination ended January 1, 1898, but was brought down to July 1, 1901, by Dr. Milo R. Maltbie.³ The report was a comprehensive exposition of the financial manipulations of the companies, and pointed out that if the water were squeezed out, the companies could pay 20 per cent. of their gross income to the city, put aside 4 per cent. for a depreciation fund, and still declare 6 per cent. dividends. Or, according to the conclusion of the committee, fares could be lowered to 4 cents, 6 per cent. dividends paid, and 4 per cent. depreciation set aside.⁴ The widespread publication of this report convinced the public, in view of the profits of the companies, that they could well afford to pay the city a generous compensation for their franchise rights, as well as to provide a more efficient service.

The extension ordinances of 1883 were to expire on July 30, 1903, and in anticipation of their expiration, public interest concerning the traction situation had begun to manifest itself even prior to the publication of the Civic Federation Report. These ordinances had in no wise extended the rights of the companies under the Ninety-Nine Year Act, but had merely postponed the decision for twenty years; and since their adoption, the attitude of the city and its officials, as well as that of the local press, had been one of constant opposition to the validity of the claims of the companies, under this act. The claims of the companies were that this act had extended all their rights and privileges for a period of ninety-nine years, but several newspapers commenced an agitation maintaining that by accepting the extension

³ The facts for the last three and one-half years were gathered from the financial papers, principally the *Economist*. However, few changes had been made since January 1, 1898, and they did not materially affect the figures given by Mr. Bard.

⁴ See page 48 of the Civic Federation Report.

ordinances, the companies had practically acknowledged that they had no further right to the use of the streets, and that with the expiration of these ordinances, the privileges in all streets granted therein, would expire. The Harlan Committee had reported that,⁵ "the validity of the attempted extension of the street railway franchises and ordinance rights by the act of February 6, 1865, had never been adjudicated and is, and always had been, disputed by the city. That the claims of such ninety-nine years extension is one which cannot be substantiated, and could be effectually contested by the city, in the courts, were the issue to be taken there".

During this period, the cry for an improved service was the dominant one, for the street railway service of the city had been utterly inadequate for many years. The belief that, regardless of the advisability of actual municipal ownership, the city should be given the legal power to own and operate the street railways at the expiration of the extension ordinances, in order to be on a proper footing to secure a recognition of its just rights in negotiations with the companies, had been rapidly gaining ground. Following the Harlan report, the council, in December, 1899, adopted a resolution creating a commission to investigate the feasibility of the municipal ownership of the street railways of the city, the conditions for renewal of the existing, or granting new franchises, and to report such measures or ordinances as they might deem advisable, the preamble of this resolution reading, "Whereas, the contractual relations at present existing between the companies operating the street car systems in Chicago, and the municipality of Chicago will shortly expire".⁶ This commission, in its report, stated

⁵ P. 37, Harlan Report.

⁶ Transcript, *Blair vs. Chicago*, Vol. I, p. 21.

the advisability of securing enabling legislation giving to the city the power to own and operate street railways, and Mayor Harrison in his annual message, in December, 1899, stated that a proposition for municipal ownership of the lines at the expiration of any new grant was one of the points, the consideration of which he deemed important, in connection with extension of franchises to the street railway companies.

On January 15, 1900, the council instructed the newly created street railway commission to report "what street car lines, if any, may be acquired by the city of Chicago, by virtue of the provisions of the ordinances under which the various street railways are operating".⁷ On December 17, 1900, this commission made its report to the city council, in which it said that, "even if under the act of 1865 the companies should possess the right to keep tracks in certain streets until 1958, it is very questionable if it confers the right to operate by any other than animal power", and also pointed out that the companies had never actually exercised rights under the authority of the act of 1865, and that act alone, but that their claims under the Ninety-Nine Year Act had always hitherto been supported by grants from local authorities, and advising that "whenever the companies claiming rights under the act of 1865 are granted new privileges by the city council, they should be required, as a condition of such grants, to renounce any rights they may claim by virtue of this act of 1865".⁸ The commission also reported the form of a bill it had framed regulating various matters connected with street railways, and providing for optional municipal ownership. Following this advice from its commission, the

⁷ Transcript, *Blair vs. Chicago*, Vol. 1, p. 22.

⁸ Transcript of Record, *Blair vs. Chicago*, p. 23.

council, on January 14, 1901, approved the draft of this reported bill, and directed the commission to take such steps as it might deem wise to promote the passage of such a bill by the legislature. Such a bill was submitted to the legislature, but never came to a vote.

On May 20, 1901, the council passed an ordinance creating a special committee of the city council, to be known as the Committee on Local Transportation, among whose duties it should be to "consider and devise plans for meeting the situation that shall arise when the street railway ordinances shall have expired in 1903." On December 16, 1901, this committee reported to the council the outline of terms which should be embodied in any ordinance given to the companies, and further said: "The immediate municipalization of the street railways of Chicago, as a practical proposition, most persons will readily admit, is out of the question. The wisdom of such municipalization in the future is an open question. . . . While we do not wish to commit the city definitely to the policy of future municipalization, neither do we wish to preclude the practical possibility of such action, if the people of the future shall desire such a policy. It is indeed unfortunate that the last general assembly of the State did not enact the necessary enabling legislation to give the city council full power to provide for future municipalization."⁹

During this period the advocates of municipal ownership were very active, promoting a constant agitation throughout the city in favor of municipal ownership as the only effective method of securing an efficient street railway service. The number of adherents to this theory had been growing with wonderful rapidity during these

⁹ See report of Special Committee on Local Transportation to the City Council of Chicago, December 16, 1901. Section 1.

years. Many citizens who at first looked askance at the idea of municipal ownership and operation had come to believe that so long as the city was without the legal power to own and operate its street car lines, that the companies, being already in the streets, could not be forced to regard any requirement which the city might place upon them. The deplorable conditions of poor equipment, small cars, double fares, congestion of cars, and overcrowding, which then existed, served to give an impetus to this municipal ownership spirit, already generated. The belief that only by giving the city the legal power to own the roads could the companies be forced to render a good service, was unintentionally, but nevertheless surely, nurtured and developed into full grown faith in municipal ownership and operation by the abominable service continually furnished to patrons.

The utter inadequacy of transportation facilities offered to the public had caused some of the Chicago papers to raise a cry that "immediate settlement" ordinances should be given to the companies, urging that if further grants were given the service would be immediately improved. But in a message sent to the council on January 6, 1902,¹⁰ Mayor Harrison said: "For my part, I regard myself as under a pledge to the people to do all in my official and individual power to bring about the possibility of municipal ownership. The question with me, then, is: Do the people desire municipal ownership?" He also pointed out that at that time the city did not possess the legal right to own and operate its railways, and that enabling legislation from the legislature would be necessary before any action could be taken in the direction of municipal ownership. He recommended

¹⁰ Council Proceedings, January 6, 1902, p. 1689.

that any further ordinance granting privileges to the companies should be submitted to the people.

Accordingly, in the aldermanic election in April of 1902, through the efforts of the Referendum League, the abstract question of municipal ownership was put to a popular vote in this form, under the "Public Policy Act."¹¹ 1. Are you in favor of municipal ownership of street railways? The result was: Yeas, 142,826; nays, 27, 998.

Following this preponderant vote favoring the principle of municipal ownership, the city council authorized the mayor to appoint a special committee of five aldermen and five citizens, "to take steps to present the necessary bills to the legislature, and to do everything possible to carry out the will of the people, so decisively expressed at the recent election". In December, 1902, this committee submitted the draft of several bills providing for the necessary enabling legislation, and on January 21 a bill giving to Illinois cities the power to acquire, own, and operate street railways, was introduced into the Senate.¹²

During January and February of 1903, while this bill was pending before the legislature, the representatives of the companies met with the Local Transportation Committee, and an open discussion of the situation occurred. In closing the conference the committee said: "It is the sense of the committee that the grant (referring to any new franchise) be for a period of twenty years, and that the city shall have the right to take over the property after ten years, making allowance for the

¹¹ On May 11, 1901, the legislature of Illinois passed the "Public Policy Act", which provided that sentiment upon any question of public policy might be tested upon petition of 25 per cent. of the voters of the city, presented sixty days before election.

¹² By Senator Carl Mueller.

value of the unexpired part of said grants, as well as for the then value of the tangible properties. The committee will consider, at this time, the value of all unexpired franchises, including the value of the unexpired portion of the Ninety-Nine Year Act—if any—in connection with the question of compensation. In line with the foregoing the city council will proceed with its endeavors to secure enabling legislation, permitting municipal ownership”.

On May 18, 1903, the legislature passed the bill, giving the cities the power to own and operate street railways, which has since become known as the Mueller law.

The chief provisions of the Mueller law are:

(1) Power is given to any city in the State to own, construct, acquire, purchase, maintain and operate street railways within its corporate limits, and to lease the same for any period not exceeding twenty years, upon such terms as the city council may designate.

(2) Although it may own its street railways, no city may operate them until the proposal to do so shall have been approved by a three-fifths vote of the electors.

(3) In making any grant or lease to a private company, the city can reserve the power to take over all or part of the street railways at or before the expiration of such grant, upon such terms as may be provided in the grant. Provision is also made that the city may give the grant to another company upon the terms that the city might have taken over the lines.

(4) City councils are given the right to give a grant for the construction and operation of a street railway in any of the streets of the city, without the consent of the owners of the land abutting the streets covered by such a grant.

(5) No ordinance authorizing a grant for a longer period than five years, nor any ordinance renewing any lease, shall go into effect until after sixty days from the date of its passage by the council. During that period, ten per cent. of the voters may demand a referendum, at

which a majority vote is necessary to render the ordinance effective.

(6) For acquiring street railways, either by purchase or construction, any city may borrow money, issuing its negotiable bonds therefor. But no such bonds shall be issued unless the proposition to do so is approved by a two-thirds vote of the electors, nor in an amount in excess of the cost to the city of the property for which such bonds are issued, and ten per cent. of such cost in addition thereto.

(7) In the exercise of any of the powers granted in this act, any city is given the power to acquire, take, and hold all necessary property, either by purchase or condemnation proceedings.

(8) In lieu of issuing bonds pledging the credit of the city, any city may issue interest-bearing "street railway certificates," which shall, in no case, become an obligation of the city, or payable out of any general fund, but shall be payable solely out of a specified portion of the income derived from the street railway property, for the acquisition of which they were issued. Such certificates can be issued to an amount ten per cent. in advance of the cost of the street railway properties.

(9) No ordinance providing for the issuance of such certificates shall be effective, until it is submitted to a popular vote, and is approved by a majority of the electors.

(10) This act is not in force in any city until the question of its adoption in such city is first submitted to the electors of that city, and approved by a majority vote.

In October of 1903, the council passed an ordinance providing for the submission of this act to a popular vote at the election of April 5, 1904, to determine whether it would become operative in Chicago. At that election the act was approved by a vote of 153,223 against 30,279. Together with the adoption of the Mueller bill, the two following propositions were adopted, as indicated:

(1) "Shall the city council, upon the adoption of the Mueller law, proceed without delay to acquire the ownership of street railways under the powers conferred by the Mueller law?" For—121,957. Against—50,807.

(2) Shall the city council, instead of granting any franchise, proceed at once, under the city's police power, and other existing laws, to license street railway companies, until municipal ownership can be secured, and compel them to give satisfactory service?. For—120,863. Against—48,200.

CHAPTER IX.

TENTATIVE ORDINANCE REJECTED.

The Union Traction Company had commenced bankruptcy proceedings on April 22, 1903, and the unsettled condition of its affairs placed the city at a great disadvantage in endeavoring to secure an improved service, upon the North and West sides. However, negotiations were taken up immediately with the controlling South Side company, the Chicago City Railway. On August 24, 1904, the Committee on Local Transportation reported to the council an ordinance to that company, which became known as the "tentative ordinance". It was to run for twenty years. It recognized the validity of the claims of the companies under the Ninety-Nine Year Act, but commuted them and all other outstanding grants to the single period of thirteen years. A complete reconstruction of the system was provided for. At the expiration of the thirteen year period, and at the end of each year thereafter, during the life of the ordinance, the city was given the right to purchase for itself, or for any licensee named by it, the property of the company. However, at this time, the sentiment for immediate municipal ownership as opposed to the giving of a twenty year grant was very strong. In the spring of 1905, Edward F. Dunne was nominated by the Democratic party as its candidate for mayor upon an "immediate ownership" platform. The plan advanced by Mr. Dunne and his followers was that the city should at once open negotiations with the companies for the purchase of their properties and their unexpired franchise rights; but that in case the city and companies

should fail to reach an agreement, the city should proceed immediately either to secure the ownership of the street railways by condemnation proceedings, as provided for in the Mueller law, or to establish new lines in place of those in operation. The Republican party nominated as its candidate Mr. John M. Harlan, upon a platform favoring a settlement along the lines suggested in the tentative ordinance.

Mr. Dunne was elected mayor. At this election these questions were submitted with the following result :

(1) Shall the city council pass the ordinance reported to it by the Local Transportation Committee, on August 24, 1904, granting a franchise to the Chicago City Railway Company?

Yeas—64,381. Nays—150,785.

(2) Shall the city council pass any ordinance granting a franchise to the Chicago City Railway Company?

Yeas—60,020. Nays—151,974.

(3) Shall the city council pass any ordinance granting a franchise to any street railway company?

Yeas—59,013. Nays—152,135.

The remarkable fact about this election was that in every ward in the city there was a large majority against these propositions. The people had manifested themselves as being opposed to the granting of any further franchise to any street railway company, and as being in favor of securing immediate municipal ownership.

On July 5, 1905, Mayor Dunne submitted to the council two plans for procuring municipal ownership. One plan proposed an ordinance for the issuance of "street railway certificates" with which to purchase the lines, and for municipal operation. The other plan, known as the "contract" plan, provided for a body of trustees who should construct a street railway system, holding and operating the same until the city should be able to take over the system, and operate it.

The fact that the Ninety-Nine Year Act had not yet been decided by the courts, placed the city at a great disadvantage in its dealings with the companies. During the following year the companies continued their negotiations with the Committee on Local Transportation, endeavoring to secure further franchises, but on January 18, 1906, the council passed an ordinance providing for the issuance of \$75,000,000 in street railway certificates, according to the provision of the Mueller law, with which to equip the street railway properties.

CHAPTER X.

DECISION OF THE NINETY-NINE YEAR ACT.

Following the series of failures on the part of the companies to secure, either from the legislature or the city council, effective long term grants with which to back up and fortify their claims under the Ninety-Nine Year Act, they based their sole reliance for long term privileges upon their alleged rights under this act.

The various steps taken by the council looking towards renewal of franchises in the years immediately preceding 1903 had ignored the rights claimed by the companies under this act, and the attitude of the city officials had been one of opposition to any recognition of its validity.

As the result of the various acts on the part of the city and the city officials, based upon the assumption that many of the street privileges of the companies would expire in 1903, the validity of the act was taken into the courts by the receivers of the Chicago Union Traction Company, and its underlying lines, the North Chicago Street Railroad Company, and the West Chicago Street Railroad Company. These receivers had been appointed by the Guaranty Trust Company of New York, which held judgments of \$318,690.66 against the Chicago Union Traction Company, \$656,052.66 against the North Chicago Street Railroad Company, and \$270,440 against the West Chicago Street Railroad Company. No property being found with which to satisfy these judgments, receivers had been appointed for the properties of all three companies.

On July 18, 1903, the receivers for these companies filed two bills in the Circuit Court of the United States for the Northern District of Illinois, one against the City of Chicago, the Chicago West Division Railway Company, the Union Traction Company, and the West Chicago Street Railroad Company, the other against the City of Chicago, the Chicago Union Traction Company, and the North Chicago City Railway Company.

The first bill stated, that under the order of the Court, as receivers, the complainants were in possession of a system of street railways in the West division of the city, that the property included all the rights, privileges, and franchises originally granted to the Chicago West Division Railway Company, by the State of Illinois, which rights had, by lease and purchase, become the property of the Union Traction Company. That said receivers had been directed by the Court to make certain expenditures,¹ for which it was necessary to issue receiver's certificates, which they found impossible to do on account of the many hostile acts of the city of Chicago, its council and its mayor, in declaring that many of their franchises were about to expire in 1903—which acts constituted an impairment of the contract rights and franchise secured to the companies, as granted by the legislature of Illinois on February 4, 1859, and as extended for a period of ninety-nine years, on February 5, 1865.

The second bill stated that the receivers were in charge of one hundred miles of street railroad and franchises belonging thereto, in the north division of the city, including a franchise originally granted to the North Chicago City Railway Company, but which were now the property of the Union Traction Company.

The bills maintained that all street privileges granted

¹ Five hundred and eighty thousand dollars.

to the North Chicago City Railway Company and to the West Division Railway Company, prior to 1865, were, by virtue of the act of 1865, extended for a period of ninety-nine years, and therefore requested that the Court should decree the Chicago West Division Railway Company and the North Chicago City Railway Company to be vested by the State of Illinois with the franchises and right to own, maintain and operate their street car lines upon all streets given prior to the passage of the act of 1865, for a period of ninety-nine years from the date of the incorporation of said companies, and thereafter, until the city should purchase the lines upon their then appraised value, according to the terms of the ordinance contract.

The answer filed by the city contended that the act of 1865 was unconstitutional, that as construed by the companies it was void, that said act did not extend the duration of the franchises beyond the time fixed in the various ordinances given to the companies by the city; that the time for operation of certain of the lines existing under ordinances passed prior to July 30, 1883, expired on July 30, 1903, by reason of the time fixed in the extension ordinance, and by reason of the limitation placed upon the city by the City and Village law, which forbade franchises being given for any period exceeding twenty years. Certain other minor points were brought out during the litigation, both by the city and the companies, but these are the grounds upon which the contention as to the extension of franchise rights was made.

The case having been tried, the Circuit Court held that the legislative acts of 1859, 1861, and 1865 constituted a grant to the companies to use the streets of the city, to be designated by the council; and that the act of 1865 extended the franchise of the companies for ninety-

nine years, the extended life of the corporation; but that these acts constituted a grant by the legislature of only such streets as were authorized to be used or occupied by the city before it elected to be governed under the City and Village law; and that after May 3, 1875, the date when the city was incorporated under said City and Village law, all street privileges given to the companies were regulated by the city ordinances affecting the same.

However, the case was carried to the United States Supreme Court, where the decree was reversed.² The opinion of the Court, delivered by Judge Day, which was announced on March 12, 1906, and filed on April 2, 1906, stated that the Act of February 6, 1865, amending the Act of February 14, 1859, had the effect of extending the corporate lives of the North Chicago City Railway Company, the Chicago City Railway Company, and the Chicago West Division Railway Company for a term of ninety-nine years. It affirmed the contracts with the city prescribing rights and privileges in the streets of Chicago, in all respects as theretofore made. It recognized and continued in force the right of the city and companies to make contracts for the use of the streets upon such terms and conditions as might be agreed upon between the council and the companies; but held that the ambiguous phrase "during the life thereof" in the act of 1865 did not operate to extend the existing franchises for ninety-nine years, nor limit the right of the city to make future contracts with the companies, covering shorter periods.

The Court also held that the North Chicago City Railway Company had no right to the use of the streets until purchase by the city; inasmuch as the ordinances granting it rights, of May 23, 1859 expressly provided "for

² McKenna, Brewer, and Brown dissenting.

twenty-five years and no longer." However, the right of the Chicago West Division Railway Company to occupy the streets until purchase by the city was affirmed, inasmuch as the grant given on the same date, to the Chicago City Railway Company, from which the Chicago West Division Railway Company secured its rights, was for twenty-five years and until purchase by the city.

CHAPTER XI.

THE WERNO LETTER.

The decision on the Ninety-Nine Year Act placed the city in a much more advantageous position to deal with the companies. The last vestige of claim to long term grants was banished. The only rights of the companies which the city was now compelled to recognize were (1) the right to operate upon certain streets until purchase by the city, (2) the right to operate on a few streets, the franchises for which had been granted since 1883, and had not yet expired, and (3) the right to operate the remainder of the system at the sufferance of the city, subject to its orders to cease operation at any time, without any obligation on the part of the city to purchase their tangible property.

In accordance with the provision of the city council of January 18, the proposition as to whether or not the city should issue \$75,000,000 of railway certificates was submitted to a vote at the April election in 1906. The result indicated that a majority of the voters believed that if the city was to proceed to municipal ownership, the issuance of certificates was an absolute necessity.

The propositions voted upon at this election and the results were:

(1) Shall the \$75,000,000 street railway certificate ordinance be approved?

Yeas—110,225. Nays—106,859.

(2) Shall the city of Chicago proceed to operate street railways?

Yeas—121,916. Nays—110,323.

(3) Shall the council proceed to secure municipal ownership under the Mueller law, instead of granting pending franchise ordinances, or any other ordinances granting franchises to private companies?

Yeas—111,955. Nays—108,087.

Both the first and third propositions carried, but the operation proposal was defeated, inasmuch as the Mueller law required a three-fifths vote for municipal operation.

A majority of the votes had now been unmistakably cast for municipal ownership on several occasions; the city was authorized to issue \$75,000,000 of railway certificates with which to acquire the lines, but it lacked the right to operate. The Committee on Local Transportation therefore requested Mayor Dunne to outline the plans upon which he would suggest that any settlement with the companies be made, and on April 12, 1906, Mayor Dunne sent to Alderman Charles Werno, chairman of the committee, a letter embodying what he considered should be the salient features of any plan of settlement. He pointed out that the work of this committee divided itself into two parts:

“First—The accomplishment of municipal ownership of the street railway system, and

Second—The improvement of our street railway service while municipal ownership is being established.”

In making plans for the immediate improvement of the service, he said “the controlling consideration must be that nothing shall be done which will impair the right of the city to acquire the street railway system as soon as it has established its financial ability to do so. The first practical step to be taken, appears to me, to be to request the existing companies at once to indicate to your committee whether they are willing to enter into an agreement to sell to the city all their tangible property and unexpired rights, at a price to be now fixed, and to

undertake the improvements of their service immediately . . . the city to have the right to take over this property at any time, upon reasonable notice. If they will join in the reconstruction of their entire system, upon plans to be adopted by the city with their concurrence, which shall provide for unified service, through routes, universal transfers, and operation under revocable license, then they should be adequately assured of the payment of their present property and additional investment, when the city does take over their lines, and they should receive a fair return upon this present and future investment and some share of the remaining net profits while they continue to operate. Subject to these provisions, the profits of operation should go to the city as a sinking fund for the purchase of the property."

The committee at once opened negotiations with the companies along the lines outlined by Mayor Dunne in this letter. While these negotiations were in progress, Judge Windes of the Circuit Court, on September 15, rendered a decision upholding the validity of the Mueller law, and the \$75,000,000 railway ordinances. The case was immediately appealed to the Supreme Court of Illinois; the general public opinion being that the decision of the lower court would be affirmed.

PART IV.

THE PROBLEM OF 1906-7.

The conditions which the Committee on Local Transportation was called upon to face, in drafting new ordinances along the lines suggested in the Werno letter, were most complex and confusing. There was a decided difference of opinion between the representatives of the companies and of the city as to the status of the franchises under which the companies were operating, a variance as to the value of the properties, as well as a divergence of public opinion as to the plans which should be adopted by the city, in arriving at some settlement with the companies. In order that the reader may better understand the complexity of the problem at that time, we have endeavored to outline the conditions which confronted the committee.

CHAPTER XII.

THE COMPANIES.

The companies with which the committee must negotiate were the Chicago Union Traction Company, controlling the traction situation on the North and West Sides, and the Chicago City Railway Company, occupying a similar position on the South Side. The control of these companies even extended into the outlying districts; and although there were a few minor suburban companies in operation, these two were the only ones with which the public generally was concerned in its demands

for an improved service. A brief sketch of the steps in the development of these two companies follows:

CHICAGO UNION TRACTION COMPANY.

The first company operating a street railway upon the North Side was the North Chicago City Railway Company, which was incorporated in 1859, with a capital stock of \$500,000. This company rapidly developed a very profitable system, and by 1886 it had 45 miles of track in operation, the market value of its stock being about \$500 per share.

On May 24, 1886, this company entered into an agreement with the North Chicago Street Railroad Company, by which the North Chicago City Railway Company conveyed to the latter, for a term of 999 years, all its property and franchises, in return for which the North Chicago Street Railroad Company agreed to pay the interest on all bonds and mortgages of the North Chicago City Railway Company, and also to make a yearly payment of 30 per cent. on its capital stock. The company immediately began operation of the North side lines, and by 1899 it owned property, the original cost of which was about \$7,000,000.

In 1863 the Chicago West Division Railway Company had purchased from the Chicago City Railway Company all the West side lines of the latter, together with its franchise privileges in the West division of the city, the consideration being generally understood to be about \$200,000. Following this purchase the West Division Railway Company operated and developed its system, and in 1887 was operating about 100 miles of track, and had a total of outstanding liabilities of \$5,468,071.17.

On February 12, 1883, the Chicago Passenger Railway Company was incorporated with a capital stock of \$1,000,000, and by 1888, this Company was operating

about 30 miles of track in the West Division, some of its lines possessing down-town terminals.

On July 19, 1887, the West Chicago Street Railroad Company was organized, with a capital stock of \$10,000,000, for the purpose of securing control of all street car lines on the West side. On October 20, 1887, this newly organized company secured a lease covering the properties and franchise rights of the Chicago West Division Railway Company—the new company agreeing to pay the interest on the bonds and mortgages of the West Division Company, and as rentals, a sum equal to 35 per cent. on its capital stock.

By similar leases of November 16, 1888, and March 15, 1889, the West Chicago Street Railroad Company secured control of the Chicago Passenger Railway Company, guaranteeing the interest on its bonds, and as rentals, a sum equal to 5 per cent. of its capital stock. On April 1, 1899, the new company also secured from the West Chicago Street Railroad Tunnel Company, for 999 years, the exclusive use of the Jackson Street Tunnel, yet to be built. Immediately upon securing control of its lesser companies, the West Chicago Street Railroad Company began the operation and extension of the West side system, until on December 31, 1897, the cost value of its property was¹ \$16,317,139.34. In the month of February, 1899, a corporation, known as the Chicago Consolidated Traction Company, with a capital stock of \$15,000,000 acquired by purchase the properties and rights of the North Chicago Electric Railway Company, Chicago Electric Transit Company, North Side Electric Street Railway Company, Chicago and Jefferson Urban Transit Company, Cicero and Proviso Street Railway Company, Ogden Street Railway Company, Evanston

¹ Civic Federation Report.

Electric Railway Company, and North Shore Street Railway Company, all of which were suburban lines being operated on the North and West Sides.

On May 24, 1899, was organized the Chicago Union Traction Company, for the purpose of securing control of all the North and West side companies. On June 1, 1899, this company leased all the property and franchises of the North Chicago Street Railroad Company, and the West Chicago Street Railroad Company, thereby becoming the operating company for these two companies. By the terms of the lease, the Union Traction Company agreed to assume all obligations of the lessor companies, to guarantee their bonds, to pay all sums provided for in the preceding agreements between the companies, to pay the North Chicago Street Railway Company a sum equal to 12 per cent. annual dividend upon the capital stock of that company, and to pay the West Chicago Street Railroad Company a sum equal to 6 per cent. a year upon its capital stock. The Union Traction Company was capitalized at \$32,000,000, of which \$12,000,000 was preferred stock and \$20,000,000 common.

On December 1, 1899, the Union Traction Company made an operating agreement with the Chicago Consolidated Traction Company whereby it secured control of that company. Though it issued no bonds of its own, the bonds of the North and West Side Companies, and the Consolidated Company, guaranteed by the Union Traction Company, amounted to \$32,527,000. On July 1, 1900, the total original cost of the assets was \$2,213,132, while its liabilities were \$34,233,165. Owing to the swollen condition of its liabilities, the company was able to pay dividends for but a short time, and in 1903 began bankruptcy proceedings, though continuing to operate its lines. The operations of this company in

overcapitalizing its properties were characteristic of the methods employed by many public service corporations operating under municipal franchises. However, the public was most interested, not in the financial manipulations of the company, but in securing an improvement in its service. In 1906 the company was operating 486.32 miles of track in the North and West divisions of the City.

THE CHICAGO CITY RAILWAY COMPANY.

The Chicago City Railway Company was incorporated on February 14, 1859, with the power to construct and operate railways in the South and West Divisions of the city. In 1863 this company sold its West Side lines and franchises to the Chicago West Division Railway Company, but continued its operations on the South Side, gradually developing the system, until in 1906, it had extended its lines in a complete net work over the entire portion of the city south of the south branch of the river. The capital stock of this company in 1906 was \$18,000,000, and it was operating 218.95 miles of track.

CHAPTER XIII.

STATUS OF THE FRANCHISES UNDER WHICH THE COMPANIES WERE OPERATING.

FRANCHISES EXPIRED.

All the street privileges, the grants for which were made for a definite number of years, prior to the adoption of the extension ordinances in 1883, and which were included therein, had expired.

FRANCHISES OPERATIVE UNTIL PURCHASE BY CITY.

All the street privileges granted to the Chicago City Railway Company by the ordinance of May 23, 1859, were operative until the city should purchase the physical property constituting the lines operating under said grants, upon six months' notice and appraisal; inasmuch as this ordinance merely ratifies the original ordinance of August 16, 1858, which granted the right to use the streets therein named for twenty-five years and until purchase by the city. The rights to the streets named in this ordinance had later been deeded to the Chicago West Division Railway Company, and were now controlled by the Union Traction Company.

Following the passage of the ordinances of 1858 and 1859, and prior to the passage of the extension ordinances, the council had passed occasional ordinances which were to continue in force until the lines constructed under these grants should be purchased by the city.

FRANCHISES UNEXPIRED.

Since the passage of the extension ordinances, the council had granted a number of franchises for twenty

year periods, which would expire at various times between 1907 and 1921.

As to the status of all franchises which clearly came under one of the above three heads there was practical agreement between the representatives of the city and of the companies. However, there was a large number of franchises concerning which there was considerable dispute as to the date of expiration.

FRANCHISES IN CONTROVERSY.

In granting extensions of certain main lines, from time to time, the council had provided in the ordinance granting the extension, that the company to which the franchise was given should operate for a single fare over both the main line and the extension. The companies, therefore, claimed that the city had extended, by operation of law, the franchise upon the main line until the expiration of the franchises upon the extensions.

The greatest difference between the claims of the city and the companies was as to whether the franchises upon particular streets had expired by limitation, or whether such franchises authorized the companies to continue operation on these streets until the city—or in some cases, its licensee,—should purchase and pay for the physical property upon an appraised valuation. This contention arose because of the fact that since the passage of the extension ordinances, in 1883, the city had given franchises to the companies, for extension lines, such grants being given for a definite period, generally twenty years, but providing in the ordinance that the grantee company should connect the extension lines with its already existing lines, and requiring that passengers be carried for a single fare over the entire system of the company, a part of which possessed the right to operate

until purchase by the city. The companies claimed that all provisions requiring connection of extensions with lines operating under franchise effective until city purchase, operated to postpone the exercise of the city's right to purchase until the expiration of the period stated in the ordinance covering the extension line. The following summary shows the classification of franchises, according to the claims of the city, and of the companies.¹

¹ P. 19, Report of Traction Valuation Commission.

CLASSIFICATION OF FRANCHISES.

Date of Expiration.	Chicago City Rail- way Company.		Chicago Union Traction Company.	
	Number Claimed by City.	Number Claimed by Company.	Number Claimed by City.	Number Claimed by Company.
Expired	71	29	170	114
Purchase (6 months).	12	56	18	74
1906.....	2	2	..	..
1907.....	13	12	12	12
1908.....	..	..	4	4
1909.....	7	7	4	4
1910.....	..	..	1	1
1911.....	..	..	4	4
1912.....	13	12	18	18
1913.....	2	2	..	..
1914.....	6	6	11	11
1915.....	12	12	14	14
1916.....	3	3	9	9
1921.....	..	..	1	1
Totals	141	141	266	266

CHAPTER XIV.

VALUE OF PROPERTIES.

On September 27, 1906, the companies submitted to the Committee on Local Transportation, the price for which they would sell their properties to the city, and accept a lease from the city along the lines suggested in the Werno letter.

The price demanded by the Union Traction Company for its tangible property was \$29,294,472, and for its unexpired franchise rights and other intangible values \$13,825,040, or a total of \$43,119,512. The Chicago City Railway Company submitted the value of its tangible property as \$20,103,436 and the value of its intangible property as \$30,426,164. These estimates were considered excessively high and the committee appointed a special valuation commission, to consider the detailed inventories and estimates of value to be submitted by the companies, and to ascertain whether the valuations thus listed were "reasonable, just, and fair". This commission secured expert services in estimating the various properties, franchises, etc., owned by the companies. The inventories and estimates of value were submitted by the companies on June 30, 1906, and no account was taken by the commission of any improvements in the system after that date; the franchise values were also submitted as for the same date.

The companies, in their estimate of the franchise values, based their claims upon an average length of franchise of seven years for the entire street railway system. In supporting this claim the companies agreed that before attempting to purchase the lines, the city

would not only have to establish its legal rights to do so, but would also have to demonstrate its financial ability to raise the necessary funds, before a purchase, either voluntary or through the power of condemnation, could be consummated.¹ However, the commission was advised by its special traction counsel² that the city could reasonably expect to acquire the property in from twelve to twenty-four months from January 1, 1907, if the Supreme Court should sustain the Mueller law. Therefore the commission reported "that the value of the present franchises should be determined for the purpose of the pending negotiations upon the theory that the city will be held to possess the power necessary to acquire the present railway properties either by eminent domain proceedings, or otherwise, and that a fair and reasonable adjustment of the matters in dispute would be to allow the companies the value of the right of operation for eighteen months, on the streets where the franchises are now claimed to have expired, or are subject to city purchase, and to estimate each of the unexpired term grants as running to the dates of their respective terminations". Accordingly the commission estimated the existing street privileges upon this basis.

Concerning the question of what allowance should be made for the pavement in the right of way of the companies, the commission was advised by its counsel that the legal title was in the city of Chicago, and not in the companies, and therefore the commission did not consider the value of the pavement as a part of the physical property, although for purposes of inspection the value of the pavement was carefully estimated and submitted with the report.

¹ Report of Traction Valuation Commission, p. 15.

² Walter B. Fisher.

The commission, which first met on July 9, 1906, submitted its reports to the Committee on Local Transportation on December 10 of that year. This report, based upon the eighteen-month franchise period, gave the total values of the existing tangible and intangible properties of the companies as follows:

	Without Paving.	With Paving.
Chicago City Railway Company.....	\$20,536,510	\$22,369,068
Chicago Union Traction Company..	26,116,237	28,625,714
Total	<u>\$46,652,747</u>	<u>\$50,994,782</u>

CHAPTER XV.

COMPENSATION.

Aside from the expenditures made by the companies in their rights of way, the only compensation which had been made to the city, by the companies, for their franchise rights, was the \$50 car tax provided for in the extension ordinances. However, a comparison of the actual amounts received from this source, with the number of cars owned and operated by the companies, disclosed the fact that the novel method¹ adopted of computing the car taxes, was decidedly favorable to the companies.

In the year 1906, the city received from the Chicago Union Traction Company in car taxes \$40,257.25,² while the report of the company for that year showed 2523³ cars owned and in operation, which at a \$50 stationary car tax would have brought into the coffers of the city \$126,150. The Chicago City Railway Company in the same year paid \$36,487.50 in car taxes, while its reports show a total of 2181 cars owned, which at \$50 per car would yield taxes to the amount of \$109,050.

The amounts received by the city from car taxes since the adoption of this system were:

¹ Cf. p. 14.

² Taken from the City Revenue Ledger, Comptroller's office.

³ Reports filed by the company in *Street Railway Investor's Guide* for 1906.

1884.....	\$24,614.05 ^a	1894.....	\$70,429.67
1885.....	26,852.55	1895.....	72,436.76
1886.....	30,530.85	1896.....	68,816.00
1887.....	34,310.82	1897.....	81,028.45
1888.....	35,321.32	1898.....	80,581.03
1889.....	38,058.31	1899.....	79,645.61
1890.....	39,633.25	1900.....	105,058.09
1891.....	45,848.55	1901.....	120,898.64
1892.....	47,385.94	1904.....	172,997.12
1893.....	58,947.50	1905.....	52,550.00 ^b

^a The amounts up to and including 1901 were secured from the report of F. V. Brandendecker, City Collector, December 31, 1901, and the amounts for the years 1904 and 1905 were secured from the 49th report of the City Comptroller, p. 62.

^b The apparent discrepancy between the amounts received in 1904 and 1905 is caused by the fact that the Chicago Union Traction Company paid \$138,221.95 towards the erection of the West Division Street Bridge, which amount was remitted from its car taxes. See 24th annual report of the Department of Public Works.

CHAPTER XVI.

SERVICE.

OVERCROWDING.

Apparently no effort was being made by the companies to supply sufficient cars comfortably to accommodate the traffic, the number of cars operated being entirely insufficient to meet the needs. Especially was this true in the business district. In providing traction facilities for this district the companies seemed never to have forgotten the significant statement, reputed to have been made by Mr. Yerkes that "the strap hangers pay the dividends." The conditions of overcrowding which prevailed during rush hours in the districts in which large numbers of laboring people reside, were absolutely revolting. During that portion of the day, the cars were invariably packed to their utmost capacity, many passengers being compelled to stand clinging to straps, while others were packed and jammed into the aisles and vestibules. The operation of many small and antiquated cars was one of the causes for the existing condition of overcrowding.

On July 10, 1905,¹ the council had passed the "Service and Comfort" ordinance, which was a comprehensive measure intended to secure both comfort and safety to passengers. It contained provisions regarding heating and ventilation together with a clause providing that the companies "should keep the tracks on which such cars are operated and the car itself in such condition as to insure and provide the reasonably safe, convenient, and

¹ Published by authority of the council on October 23, 1905.

comfortable transportation of passengers, without unnecessary noise and jolting, and to furnish a sufficient number of cars on each separate line, to carry passengers comfortably and without overcrowding," and provided a penalty of from \$25 to \$100 for each car operated in violation of this law. Apparently no effort had ever been made by the companies to obey this ordinance. In the month of December, 1905, Dr. Maurice L. Doty, special traction commissioner for the city, had conducted a series of investigations as to the condition of overcrowding. As a result of these investigations, the city filed suit against the City Railway Company for \$500,000, alleging 5000 specific violations of this ordinance; and for \$1,500,000 against the Union Traction Company, alleging 15,000 specific violations. The companies then secured an injunction against their further prosecution,² but in October, 1906, the State Supreme Court reversed the injunction, and left the city free to proceed with its prosecution of the companies. The suit was then taken to the Circuit Court of Cook County. Here the companies denied the validity of the ordinances under which the penalties were claimed, on the grounds that

"1st. The organic law of the city of Chicago forbids a penalty in excess of \$200 for a single offense.

2d. It is ambiguous and uncertain.

3d. It is unreasonable."

The particular paragraphs of the ordinance, under which suit was brought, read as follows:

"It shall be unlawful for any person, or corporation operating street railway cars within the city of Chicago to permit any car to be in use, or to be operated,—unless there shall be furnished a sufficient number of cars on each separate line to carry passengers comfort-

² Given by Judge Mack, of the Circuit Court.

ably without overcrowding, and which cars shall be run upon a proper and reasonable time schedule. Any person, firm, company, or corporation who shall be guilty of violating any of the provisions of the preceding section shall be fined not less than \$25, nor more than \$100 for *each* car operated in violation of this law, and each day of operation of such car shall be considered a separate offense”.

The Court held that under this peculiar wording, “the sole question is—are there sufficient cars—if so, the company may operate—if there are not, it is unlawful for the company to operate any cars. Therefore, the penalties under this ordinance may amount to thousands of dollars for a single offense of not providing sufficient cars on any separate line,” and for that reason, held the ordinance to be void. The Court further said, “How are we to ascertain whether or not passengers are carried comfortably? Personal comfort indicates a state of mind. The law must declare to a common intent what the offense is—it cannot be left to the eccentricity of the individual or the caprice of a jury. The same is true of overcrowding. What is a crowd on a street car? Clearly the law required some method of expression in exacting a prohibition, which will leave no doubt in the minds of the persons affected as to what rule or standard of conduct is required.” Accordingly, the Court held the ordinance to be void for not defining with certainty the offense which was condemned. The case was immediately appealed by the city to the State Supreme Court, where the question of the validity of this ordinance is yet pending. Out of about 3,000 cars in daily operation, every one was probably overcrowded at some time during each day. That the condition of overcrowding was much worse than in any other large city, is an undoubted fact.

How much the system of collecting a \$50 car tax on

the basis of 13 trips per day, per car, was responsible for this condition, it is impossible to state, although its influence was probably slight. The greatest factor in producing this condition was, beyond doubt, the abnormal greed of the companies, and their desire to refrain from any further investment in equipment, and thus maintain dividends upon their immense amount of watered stock.

CONGESTION OF CARS.

Instead of a system of through routes, whereby cars could be operated in a continuous journey between the northern and southern city limits, and to and from the West side to either the North or South side, both companies treated the heart of the city as the proper place for their terminal points. Every car which came into the down town district had to reverse its journey, generally by means of a switch, although a few loops were in use. On many of the main thoroughfares, cars came in from the North and South sides, approached within a few feet of each other, where they stopped to switch, each car reversing its position and returning to the outer terminal of the line. This process occasioned much congestion of cars in the crowded district. Often over one hundred cars used the same switch in an hour, and several cars could be seen, waiting their turn to switch, thus blocking the streets with cars on track. Such a system was a constant source of obstruction to traffic, and an effective preventative to rapid street railway transportation.

CARS IN TRAINS.

The companies were adhering to a practice, long abandoned elsewhere, of operating their cars, in the business district, in trains. The practice probably originated in Chicago during the period when horse cars were used on the outlying lines and cable was used on the main lines,

and in order to save the passengers from changing cars, each cable car would collect horse cars at intersecting points, and thus trains were formed and carried down town. However, with the introduction of the trolley the companies had not abandoned this antiquated system.

The irregular jerking of the cars hauled in trains was annoying, especially so inasmuch as most of the trail cars were of exceedingly light construction, permitting every defect in the track to be felt throughout the car. But a more serious objection to this system of operation was the blockading and congestion which it caused at the corners and points of intersection, as a train of two or three cars when stopping, often completely blocked traffic. Of the cars in operation in 1906, the Union Traction Company owned 631 trail cars and the City Railway Company owned 552.⁸

TRANSFERS.

The proposition of securing transfers from one part of the city to another, had always been one of the greatest problems in the Chicago traction situation. No transfers were being issued between the Union Traction Company and the City Railway Company. The fact that both of these companies operated in the heart of the down town district made the matter especially vexing, and the demand that some system of universal transfers be embodied in the plan of settlement was a pressing one.

In the first ordinance, granted on August 16, 1858, authorizing the Chicago City Railway Company to construct and operate lines on the South and West sides, was included the requirement that "the ride for any distance shall not exceed five cents." However, when in 1863, the Chicago City Railway Company deeded its privileges

⁸ Figures taken from reports of the companies in the *Street Railway Investor's Guide* for April, 1906.

to the Chicago West Division Railway Company, this requirement was ignored, and under this divisional arrangement, each company collected a five cent fare for a ride on its line, and never since then had transfers been given from the companies controlling the West Side lines, to the lines of the Chicago City Railway Company, although an ordinance had been passed by the city council, compelling transfers to be given between the West and South side lines. However, the companies denied the right of the city to make such a requirement, and a period of litigation had followed, Judge Grosscup of the United States Circuit Court deciding that the ordinance was invalid, and that it was not within the power of the city to pass it in view of the fact that the companies had franchises, some of which authorized them to collect a five cent fare, and such a transfer system would in some cases have deprived them of this right. The city then appealed the case to the United States Supreme Court, where the case is yet pending.

Various devices had been used by the companies to evade any requirements for transfers. The Chicago City Railway Company, at various times, had adopted rules concerning transfers which were quite confusing—once demanding that transfers be given just before alighting, again adopting a rule that transfers be given only at time of payment of fare,—and at one time the company refused to grant transfers upon transfers, thus enabling it to collect many double fares for continuous trips in the same direction.

A much more clever scheme had been adopted by the parties in control of the companies on the North and West sides. The Chicago Consolidated Traction Company, organized in January, 1899, had acquired all the lines of the companies of the North and West sides of Chicago, while the Union Traction Company, or-

ganized in May, 1899, acquired (by lease) the main lines of the same companies. The bonds of the Consolidated Company were guaranteed by the Union Traction Company, the management of the Consolidated was in control of the Union Traction Company, the officers of the two companies were identical, their offices were together, and the Consolidated Company ran its cars over the lines of the Union Traction Company. In purpose and fact there was but one company, the Chicago Union Traction Company, but pretending separate ownership, both companies refused transfers and each company collected a separate fare.

On June 26, 1890, the city council had passed an ordinance requiring every company operating in Chicago to issue transfers at any intersecting point on its own lines. This ordinance, was, however, quite generally disregarded, especially by the Union Traction Company. until in December, 1901, prompted by the protest of many patrons of the roads, the city brought suits against the Union Traction Company, to recover penalties for refusing to grant transfers as provided by the ordinances. These cases, of which there were eleven, were first taken before Justice Gibbons, but appeals were taken to the Criminal Court, where Judge Ball rendered decisions favorable to the city. The litigation was finally carried to the Supreme Court of Illinois, which, on October 25, 1902, decided that the city possessed the power to require transfers, the Court holding that the power to fix fare includes the power to provide for transfers.⁴ By this decision, each company was compelled to grant transfers on its own lines. On the same day the Court handed down another decision, stating that "the Chicago Consolidated Traction Company bears such a relation to the Chicago

⁴ Mr. Chief Justice Magruder delivered the opinion of the Court. See Ills. 199, pp. 484, 579.

Union Traction Company as to be regarded as the 'same corporation' in so far as transfer tickets are concerned", compelling the Chicago Union Traction Company and the Chicago Consolidated Traction Company to exchange transfers. Since this decision, the Chicago City Railway Company, and the Union Traction Company⁵ had issued transfers on their own lines, as had all the minor companies. However, no transfers were issued between these two controlling companies.

That a complete reconstruction of the roads, doing away with the system of divisional operation and providing for through routes, a sufficient number of well-equipped cars, and universal transfers should be a first essential of any plan of settlement, was generally conceded. Many students of the problem claimed that even such a system would fail to relieve the congestion and provide the city with a satisfactory service, and that no solution could be permanent without providing for a down-town subway loop. The service being furnished was undoubtedly worse than of any other important city. The demand for an improved service was pressing. The need of some solution was imperative.

Out of these chaotic conditions and confusing claims, which existed as the culmination of a long chain of litigation and unsystematic legislation, arose the problem before the committee of securing as soon as possible the complete reconstruction and equipment of the street railway system, with the assurance that it would be operated at the highest standard of efficiency, upon terms fair both to the city and to the companies, and providing for the possibility of future purchase of the system by the city.

⁵ Including the Consolidated Company.

PART V.
DEVELOPMENTS OF 1907.....	65
CHAPTER XVII.

PASSAGE OF NEW ORDINANCES.

On January 15, 1907, the Committee on Local Transportation reported two ordinances to the city council. Previous to this time the local press had been united in its demands that no settlement of the traction question should be made by the city council, without the approval of the electorate, and the council had adopted a resolution promising that no new street railway ordinance would be passed without being submitted to a popular vote. However, with the submission of these ordinances to the council, many of the leading papers of the city began an agitation for their immediate passage, without waiting for the referendum, their argument being that the ordinances could not be put to a vote until April, but if adopted at once by the city council, the companies could begin the work of reconstruction and improvement immediately.

Soon considerable feeling was manifested in opposition to passing the ordinances without giving the people an opportunity to understand thoroughly their contents and to vote upon them. A resolution was introduced in the committee¹ providing that the committee should recommend the adoption of these ordinances by the council, unless a petition was filed for a referendum at the April election; but if such a petition was filed, the ordinances should be amended, to the effect that they would

¹ By Alderman Foreman.

not become effective unless a majority of the votes cast at the April election should approve them, and, that with this amendment the ordinances should be passed by the council at once. This resolution was adopted and in accordance therewith the ordinances were passed February 4, by the Council, the vote being 56 for and 13 against.

One of these ordinances relates to the Chicago Railways Company, which undertakes to acquire within 120 days from the passage of the ordinances, all the properties and rights of the Union Traction Company; the other relates to the Chicago City Railway Company.

The ordinances are twenty year grants, and it was claimed would provide the best possible street railway service. By the acceptance of these ordinances the companies agree to proceed at once to reconstruct and re-equip their entire street railway systems, and to maintain the same in first class condition. A certain portion of this work is designated as "immediate rehabilitation" for which specifications are contained in the ordinances. This work is to include the removal from all the streets of the present cable lines, and the substitution of modern electric track therefor. The Chicago City Railway Company is to rebuild at least sixty miles of its present electric tracks, and the Chicago Railways Company is to rebuild at least ninety miles. The construction and equipment of the necessary system of distribution and sub-stations is required, as is also the rebuilding and equipping of car houses to enable the companies to clean and maintain their cars properly. The companies are required to increase as rapidly as possible the number of double truck cars, until the Chicago City Railway Company shall have in operation at least 800 and the Chicago Railways Company at least 1200. Twenty-one through routes are estab-

lished, together with a complete system of transfers,² which will enable the passengers to ride for a single fare in any one general direction over all the connecting lines of the two systems, together with the Chicago Consolidated and the Chicago General Traction system. The work of immediate rehabilitation is to begin with the acceptance of the ordinances and if the work is not completed within three years, the companies are to pay to the city \$10,000 per day as liquidated damages for each day that such default shall continue.

The city is authorized to require the installation of the underground trolley system in place of the overhead wires. All new rails are to be grooved. Within one year cars are to be no longer run in trains, but must be operated singly. The companies are required to pave, keep in repair, sprinkle, and keep clean from snow the parts of the streets occupied by their tracks. Numerous extensions of the existing lines are specifically provided for, and the Chicago Railways Company agrees to construct and equip additional extensions, amounting to 6 miles of double track, or 12 miles of single track in each year after the third year, while the Chicago City Railway Company is to construct at least 4 miles of double track or 8 miles of single track, in each year after the third year. The cars used by the companies are to be of the latest improved type, and the companies are required to maintain their systems at all times at the "highest practicable efficiency".

The companies agree to advance to the city, at its option, the sum of \$5,000,000 with which to build a downtown subway, to be owned by the city, the companies to receive an allowance of 5 per cent. for brokerage and an

² This obligation does not apply to any connecting point in the South division of the city, north of Twelfth Street, which includes a considerable portion of the downtown district.

annual interest return of 5 per cent., and to be given the right to operate their cars through the subway. Provision is made for the lowering of the present river tunnels as a part of the future subway system. It is distinctly understood that if the city does not exercise this option, that the companies acquire no rights in subways which the city may construct by other means. Upon purchase of the street railway system by the city or its licensee the money advanced by the companies for subways is to be refunded to them.

The city reserves the right to exercise police power and the companies agree to comply fully with all the requirements of these ordinances, and in case they shall make a continued default to do so, the city may declare all the rights of the companies forfeited.

All the construction, reconstruction, re-equipment, extensions, and additions to the properties of the companies are to be performed under the direction and supervision of the Board of Engineers. Within thirty days after the acceptance of these ordinances the two companies are to appoint one engineer to represent them on this Board, the city is to appoint one representative, and Bion J. Arnold is to act as the third member. The city and the companies may remove the third engineer, and may appoint a third engineer at any time such a vacancy may arise. In case any vacancy in the position of third engineer is not filled within thirty days, the judges of the Appellate Court for the First District of Illinois are to name the third engineer. If these judges fail to make the appointment, application is to be made to any judge of the Circuit Court of Cook County for the appointment of such an engineer. Either the companies or the city shall have the right to apply to any Court of competent jurisdiction for the removal of any member of this Board. The third

engineer is to receive a salary of \$15,000 per annum. Bion J. Arnold is to act as Chief Engineer during the period of immediate rehabilitation, and as an additional compensation for this service is to receive \$15,000 per annum. Each of the other two members of the Board is to be paid for his services at the rate of \$100 per day, though the total compensation for their services shall not be less than \$3,600 nor more than \$10,000 each, per year.

This Board is to make a report in writing on the first day of each month to the City Comptroller, of the amounts actually expended with its approval during the previous month by the companies; this certificate is to be conclusive as to the cost of reconstruction and re-equipment. No contract, sub-contract or payment is to be made for any of this work without the approval of the Board. The Board is to have the power to prescribe the form and manner in which the books and accounts of the companies shall be kept, subject to the approval of the City Comptroller. Additional through lines may be required of the companies at any time the Board may decide that the traffic demands, and the approval by this Board of any regulation in service made by the city council, shall be binding upon the companies as to the reasonableness thereof.

The financial features of the ordinance fix the value of the present tangible and intangible properties of the Union Traction System, to be acquired by the Chicago City Railway Company as \$29,000,000, and that of the Chicago City Railway Company as \$21,000,000. A fund of 6 per cent. of gross receipts is to be set aside for the payment of maintenance and repairs, and another fund of 8 per cent. of the gross receipts is to be set aside for renewals and depreciation. If these sums are not sufficient to cover these charges, any additional need must be

met by the companies, but any surplus remaining in these funds cannot revert to the companies, but remains the property of the city or its licensee, in case of purchase. The companies are to keep insured at their full insurable value, the premiums for such insurance to be paid as an operating expense. All damage claims arising out of injuries to persons or properties, the salaries of officers of the Board of Engineers, and salaries of officers of the companies, are to be charged to operating expenses.

From the gross receipts for the year there shall be deducted:

(1) All expenses of operation, including maintenance, renewals, and repairs.

(2) A 5 per cent. interest return to the companies upon the whole amount of the already fixed valuation of the properties, plus the amounts expended by the companies in the reconstruction of the roads, with a 5 per cent. brokerage and 10 per cent. construction profit thereon. After the deduction of these items from the gross receipts, 55 per cent. of the net receipts are to accrue to the city and 45 per cent. to the companies. The amounts thus received by the city are to be set aside and used for the purchase of the street railway system. This division of the net receipts is based upon the companies' right to charge a five-cent fare for the whole period, but the city has the right to commute its share, or any part of it, into an equivalent reduction of fare.

The companies are required to file with the City Comptroller annual reports, verified by the auditor of the companies, setting forth according to forms prescribed by the Board of Engineers, the amount of business done during the year, the receipts from and the expenses of conducting the business, and the books of the companies

are at all times to be subject to the examination of accountants representing the city.

The possibility of municipal ownership is provided for. The city is given the right on the first of February or the first of August of each year, having given 6 months previous notice to the companies, to take over the properties of either or both companies, upon the following conditions:

If the purchase is made for municipal operation, the city must pay:

(1) The value of the properties, as now fixed in the ordinances, and

(2) The cost of reconstruction, re-equipment, and extensions actually paid out by the companies, plus 5 per cent. brokerage, and a 10 per cent. construction profit. If the purchase be for any other purpose than for municipal operation, the city is required to pay a 20 per cent. bonus on the above amount.

The city reserves the right to give to any company the right to purchase and operate the street railway system, the price to be paid being the price which the city would have to pay for municipal operation, plus a 20 per cent. bonus. But such a licensee shall not be required to pay the 20 per cent. bonus if its returns shall be limited by the city to 5 per cent. brokerage and 5 per cent. return on its capital investment, the remainder of the earnings to accrue to the city.

On February 11, Mayor Dunne returned the ordinances to the council with his veto, and on the same night the ordinances were passed over his veto by a vote of 57 to 12. Later the legal requirements for a referendum were complied with and the ordinances became the issue of a fiercely contested municipal campaign.

Mr. Dunne was renominated by the Democratic party

for mayor, upon a platform opposed to the adoption of the ordinances, while Mr. Fred A. Busse was nominated by the Republican party for the same office upon a platform favoring the ordinances. The campaign which followed the adoption of these platforms was one of the most intense ever waged in the city of Chicago. Noon and evening mass meetings were held throughout the city, at which various speakers discussed the provisions of the ordinances. Organizations were formed, supporting and opposing the measures. The "Strap Hangers League" was formed, having for its slogan "We want seats, not straps" and "A seat for every strap hanger", and became an influential factor for the adoption of the ordinances. The "Citizens Non Partisan Settlement Association" spread broadcast throughout the city literature descriptive of the improved service which would follow the adoption of the ordinances. The Chicago Federation of Labor denounced the ordinances because they contained no protection whatever for the employees of the street railway companies, and the Municipal Ownership Central Committee waged a bitter attack against the measures upon the grounds that they rendered municipal ownership impossible, inasmuch as the rehabilitation provided for in the ordinances would cost at least \$40,000,000, which with the \$50,000,000 valuation already attached to the property would make the total amount which the City would have to pay in case of purchase at least \$90,000,000, while the authority of the city to issue certificates was limited to \$75,000,000 and the city council would probably refuse to pass ordinances providing for the issuance of more certificates.

One of the arguments advanced by Mayor Dunne in his veto message was that the ordinances did not afford assurance of any income from the proposed division to

guarantee that the city's share of net receipts would equal any fixed per cent. of the gross receipts. It was also urged against the ordinances that the securing of lower fares for a period of twenty years would be rendered impossible; that the valuation placed upon the present property of the companies was excessively high; that the city could never afford to pay the 20 per cent. bonus on the valuation of the properties; that the ordinances were so complex as to render them liable to litigation; that they denied transfers in an important part of the down town district; that the 20 per cent. bonus required to be paid by a trustee company would make it impossible for the city to utilize this method in securing possession of the lines; that the city would practically be deprived of the right to acquire the lines by power of condemnation. As opposed to the pending ordinances, Mayor Dunne and his followers proposed to secure the street railway system by exercising the city's power of condemnation, issuing street railway certificates as already authorized.

The supporters of the ordinances maintained that it would be unwise to depend upon the city's power of condemnation, derived from the Mueller law, inasmuch as the validity of that law and the certificates was yet pending in the Supreme Court; that even were this law upheld and the city should obtain possession of the lines, it did not possess the right to operate; that unless a majority of the voters should authorize the issuance of additional certificates, the city would be restricted to \$75,000,000 with which to purchase and rehabilitate the lines, which sum was declared by authorities to be entirely insufficient for the purpose; that the companies would be compelled to render an adequate service under these ordinances; and that the city could better purchase the lines immediately

upon the completion of rehabilitation, than to trust to the uncertainties, expenses, and delays necessary to condemnation proceedings.

Beyond doubt the great argument for the ordinances which appealed to the majority of those who voted for their adoption, was that the entire system was to be immediately reconstructed and rehabilitated, and that the service rendered by the companies would be such as Chicago had long been hoping for. However, the argument that the ordinances were merely stepping stones to municipal ownership, and would enable the city to take over the lines upon the completion of reconstruction, no doubt served to influence a very considerable class of voters whose sympathies were heartily with the municipal ownership movement, but who believed the passage of the ordinances would provide a greatly improved service until the city was in a position to acquire and operate the street railways.

On April 2, the ordinances were approved by a majority of 33,086.

CHAPTER XVIII.

DECISIONS UPON THE \$75,000,000 STREET RAILWAY CERTIFICATE ORDINANCE.

On April 18, 1907, the Supreme Court of Illinois rendered a decision¹ declaring the \$75,000,000 street railway certificate ordinance unconstitutional, upon the grounds that such certificates would increase the indebtedness of the city beyond the constitutional limit. Section 12 of Article 9 of the Constitution of the State of Illinois provides that "no county, city, township, school district, or other municipal corporation shall be allowed to become indebted in any manner, including existing indebtedness, in the aggregate exceeding 5 per centum on the value of the taxable property therein".

The ordinance provided that in case there is a default in the payment of the principal or interest on these street railway certificates, that there shall be a foreclosure sale, and the owners of the properties upon foreclosure shall be guaranteed a twenty year street railway franchise by the city.

The Court held that because of this provision, that the certificates would be a mortgage, not merely upon the street railway properties owned by the city, but also upon the right to use the streets of the city for street railway operation for a period of twenty years; and that inasmuch as under foreclosure the city would lose the right itself, or through its grantee, to use the streets for a period of twenty years, and would also lose any compensation which the city might have received from granting such a franchise, that the issuance of such cer-

¹ Decision rendered by Justice Hand.

tificates would be an increase in the indebtedness of the city; that the city had already so nearly exhausted its debt creating power under the Constitution, that the issue of said certificates would be in violation of the Constitution.

This decision leaves the Mueller law as a whole intact, but holds the certificate plan for putting it into effect in Chicago to be unconstitutional and void.

The decision came as a decided surprise to most Chicagoans, for legal authorities had publicly expressed themselves as believing that the decision of the Circuit Court upholding the validity of the certificates would be confirmed by the Supreme Court, and the municipal ownership features of the new ordinances had been largely built upon this expectation. Special Traction Counsel Walter L. Fisher immediately announced that a petition for a rehearing might be filed with the Supreme Court, and many now express a hope that the Court will reverse its decision, in case a new hearing is granted.

Meanwhile, neither the Chicago Railways Company nor the Chicago City Railway Company has filed its acceptance of the ordinances, although the Chicago Railways Company is making negotiations whereby it hopes to secure physical possession of the Union Traction System in the immediate future. However, inasmuch as the representatives of both companies were active in the campaign for the adoption of the ordinances, there is no doubt that the legal acceptance of the companies will be soon filed with the city.

PART VI.
WHAT OF THE FUTURE?.....	77
CHAPTER XIX.

SERVICE.

The question as to how much the service will be improved under the new ordinances is an interesting one, permitting of much speculation, but withal a vital one.

The stipulation in the ordinances as to cars, equipment, etc., are specific, and will, no doubt, in large part be complied with by the companies, which fact alone will greatly improve the present conditions. However, it is a significant fact, aside from the provisions for reconstruction, the number and equipment of cars, etc., that the provisions for an improved service are in general terms, which in law may mean anything or nothing.

The language in which the companies promise an efficient service is: "The company shall as promptly as possible do the necessary work and purchase the necessary materials and equipment to put its entire railway system and equipment in the best practical condition to enable it to furnish the citizens of Chicago the quality and kind of service contemplated and required by this ordinance, and shall at all times maintain the same at the highest practical efficiency,"¹ and if the companies "shall fail to comply with the provisions hereof with regard to the maintenance of first-class railway service . . . the city shall have the right to sue for and recover the sum of not less than \$50, and not more than \$500, for each and

¹ See Exhibit B in both ordinances.

every such failure, and each day that such failure shall continue shall be taken and held for a separate offense."²

In considering the power of the city to enforce these regulations it should be remembered that provisions much more definite than these in the "Service and Comfort Ordinances" had already been held by the courts to be void because of their uncertainty.³ What is the "best practical condition"? What is "the service contemplated and required in this ordinance"? What is "the highest practical efficiency"? In the courts these terms might be easily construed as void because of their indefiniteness.

The companies "agree to comply with all reasonable regulations of the service of the street railway system which may be prescribed by the city council." Under the city's police power the companies are legally bound to comply with all such regulations without agreeing to do so, but the experience of the city in the past in its endeavors to enforce its regulations does not justify a very great amount of confidence in this clause.

During the campaign it was maintained by the friends of the measures that the city is assured of good service because of the penalty clause. If, however, the courts should hold the provisions of the ordinances as void because of their indefiniteness, there would seem to be no provisions to enforce by the penalty clause, inasmuch as no offense is defined by the ordinances.

But presuming the service features of the ordinances to be valid and impregnable, in every respect, the question as to whether any attempted enforcement of the penalties provided in the ordinances would be effective, opens up a vast field for legal controversy.

Should the city attempt to collect such penalties, the

² Section 31, Chicago City Railway Company Ordinance. Section 32, Chicago Railways Company Ordinance.

³ Cf. p. 82.

ordinances might be regarded by the courts either as contracts between the companies and the city, or as a statutory law and requirement. If the courts held the ordinances to be contract provisions, the companies would undoubtedly deny the right of the city to collect such penalties, upon the ground that under contract law penalties are unenforceable. But if the courts should regard the ordinances as statutory law, and an exercise of the city's right to regulate the street railway companies, this right having been conferred upon the city by the City and Village Act,⁴ there would be ample opportunity for the companies to resist the payment of any penalties upon the ground that the exercise of this right to regulate is subject to the qualification that the fines or penalties imposed to enforce ordinances thereunder, shall not exceed \$200 for a single offense.⁵

Even the clause providing that if either company shall fail to complete the "immediate rehabilitation" within a period of three years as prescribed in the ordinances "that the company shall be and is obligated to pay to the city for each day that such neglect or default shall continue, the sum of \$10,000 as liquidated damages" is not a positive assurance of the city's ability to collect this sum. The language providing that this amount is to be "liquidated damages" would not necessarily be held conclusive by the courts as to the intent of the ordinances, and this sum might be regarded as a penalty stipulation and therefore held to be unenforceable.⁶ It is also possible that the courts would award liquidated damages only in proportion as actual damage could be proven by the city.

The ordinances contain a forfeiture clause, providing that if either company shall make default or neglect in

⁴ Paragraph 42, Article 5, Appendix A.

⁵ Paragraph 96, Appendix A.

⁶ Cf. p. 110.

the observance of any of the conditions prescribed, and shall continue such neglect for a period of three months it may be compelled to forfeit its right to the use of the streets. However, whether in case of failure by the companies to comply with the provisions of the ordinances, any court would declare them forfeited of their rights, is doubtful. Forfeiture has been considered in various decisions as merely "the height of penalty", in which case forfeiture would be open to the objections already pointed out concerning penalty provisions. However, if forfeiture should not be regarded, it is doubtful if any court would declare the company's rights to be forfeited, unless in case of the most extreme, gross, and continued violation, inasmuch as there is practically no precedent in law for a city declaring a public service corporation forfeited of its rights, although forfeiture clauses are a usual part of the franchise grants in many states. But in view of the fact that forfeiture clauses are quite generally unfavorably regarded by the courts, and are seldom if ever enforced against a company, unless in case of general and absolute failure to comply with any part of the franchise under which it is operating, the forfeiture clause of the ordinance is without a great deal of significance.

It is thought by many that the Board of Engineers will be a powerful factor in securing good service, inasmuch as the approval by this Board of any regulation passed by the city council is "to be binding upon the companies as to the reasonableness thereof." However, the Board will have no regulations to pass upon until the council shall in the future enact them, in which case they would be binding upon the companies regardless of the approval of the Board. The attempt to place police and judicial power in such a Board is an absolutely new

experiment in the government of American municipalities, and the success or failure of this innovation will be awaited by other cities with interest.

An examination of the ordinances opens up a vast field for legal controversy as to the usefulness and validity of the methods provided therein for enforcing the service regulations, and indicates that any attempted enforcement of such provisions may be resisted by the companies. The experience of the past has practically been that whenever enforcement of any police power ordinance regulative of street railways has been attempted, it has been resisted and contested by the companies to the courts of last resort. Certainly, in this case, when the validity of the provisions opens such a vast opportunity for litigation, there is every reason to believe that the companies will stubbornly resist any attempted enforcement of these provisions. The companies will undoubtedly improve the street railway service in the near future for their own interests by the reconstruction of the lines, through routes, etc., plans for which are already being made. Nevertheless, inasmuch as it is practically inconceivable that the city would employ its right to declare forfeiture, and in view of the open question as to the validity of the other methods provided for enforcing the good service requirements,—one must conclude the apparently formidable provisions of the ordinances are far from being iron clad guarantees of satisfactory service. Therefore, even though the provisions of the ordinances be the best which could possibly have been framed, it appears that constant alertness, continued watchfulness, and eternal vigilance on the part of the public will be necessary if an efficient service is to be obtained.

CHAPTER XX.

COMPENSATION.

City street railways possess two peculiarities which entitle municipalities to demand from them special compensation, the first being that the street railways occupy public streets and highways by permission of the city, the second being the tendency of the street railway business to become monopolistic in character. The history of street railways in American cities indicates that originally little thought was given to the value of the privileges given to the companies, but that there has been a rapidly growing recognition of the value of street privileges is proven by the fact that practically all grants made in recent years have contained provisions requiring special payments in some form, to the municipality. Franchise compensation is the payment made to the city for the privileges given by it to the street railways companies, as distinguished from ordinary property taxes.

The value of street railway franchises in Chicago is difficult to estimate, owing to the diversity of opinion as to the proper method of compensation. The Harlan Committee (1898) in computing the value of franchises existing at that time, adopted the method of deducting the cost of duplication of the physical equipment from the market value of the stocks and bonds, which system, said the report,¹ "is thoroughly recognized in the financial world." Using this method, the Committee found the total stock of the three main systems² then operating to

¹ P. 66.

² Chicago City Railway Company, North Chicago Street Railroad Company, and West Chicago Street Railroad Company.

be \$61,287,945, and the bonds \$30,324,500, making a total of \$91,612,445. The cost of duplicating the physical property was estimated at \$28,858,234.30, and therefore the value of the franchises involved was submitted as being \$62,754,210.70. There is ample room for question, however, as to whether or not this system of computing franchise values is "thoroughly recognized" in view of the fact that many public service corporations have denied the justice of the method in the courts.

The Civic Federation Report (1901) adopted the plan of ascertaining the market value of all outstanding liabilities, or the amount which would have to be expended in order to gain complete control of the Companies, which, according to the report, could be done only by purchasing at market value all outstanding stocks, bonds, and other evidences of indebtedness—from this amount was subtracted the market value of all assets or the sum which would be received if all the properties except the franchises were sold, and the remainder was accepted as representing the market value of the franchise. Using this method as a working basis, the report submitted the values of liabilities on July 1, 1901, to be \$120,235,539.73, and the present value of assets at that time as \$45,841,188.76, and therefore estimated the franchise privileges at \$74,394,050.97. This estimate was made at a time when it was believed that many of the franchises would expire in 1903, and the market value of the stocks was undoubtedly influenced by this fact.

Adopting what is sometimes called the Supreme Court⁸ method for the valuation of railway franchises,—deducting from the aggregate market value of the stocks and bonds, the par value of the same securities, gives a quite different result. According to the Harlan Committee

⁸ State Railroad Taxes, 92 U. S. Rep., 575.

(1898) we find that the total market value of the stocks and bonds of the three main Companies⁴ on December 1, 1897, was \$91,612,445.00, while the par value of the same securities was \$63,258,300.00, which gives us as the value of the franchise \$28,354,145.00.

There are objections to the validity of all these methods of franchise valuation, the paramount one being that the market price of street railway stocks and bonds is not always co-incident with the cash value of the properties. The purchase by individuals of a few shares of street railway stock for permanent investment is generally of small significance compared with the large block purchases of syndicates for purposes of consolidation and control. The fact that the intent of a purchaser is a factor in determining what price he is willing to pay, and that a large part of the stocks and bonds of street railway companies are not bought and sold upon the market but change hands in private manipulations, would seem to indicate that the market value for a few shares of stocks and bonds is not always a correct basis upon which to compute the cash value of street railways. In speaking of this method of determining the cash value of railway properties, the Interstate Commerce Commission in 1903⁵ said: "While market valuation of such securities as show a wide market may be of great use in checking values arrived at by other methods, or in enabling a correct interpretation of commercial conditions, the Commission does not hesitate to say, as a result of its experience, that the rule fails to justify a very great degree of confidence in the results to which it leads."

However, in most cases it is probably true that when but a small amount of stock is offered for sale at current

⁴ Cf. foot note on p. 116.

⁵ Seventeenth Annual Report, p. 31.

prices, that the holders thereof consider it worth more than the price offered, and for lack of a better method of determining franchise values, the public will continue to use regular market quotations as a fair indication of the cash value of the properties, and will make its estimates as to the market value of franchises by deducting from the amount thus ascertained the cost of a duplication of the physical property, the market value of all assets, or the par value of stocks and bonds.

The insufficiency of statistics at hand renders it impossible to reach any definite conclusion as to what compensation the companies could afford to pay to the city in return for their privileges. However, an interesting estimate can be made from these reports furnished by the two companies to the Traction Valuation Commission in 1906.

CHICAGO UNION TRACTION COMPANY.*

Account for year ending August 31, 1905.

Gross earnings from operation.....	\$9,208,530.24
Total operating expenses.....	6,075,720.71

Net earnings \$3,132,809.53

CHICAGO CITY RAILWAY COMPANY.*

Account for the year ending June 30, 1906.

Gross earnings from operation.....	\$7,583,356.65
Total operating expenses.....	5,839,254.81

Net earnings \$1,744,101.84

Let us assume the value of the physical property, as determined by the Traction Valuation Commission, to be a just basis upon which returns should be made to capital. It must, however, be remembered that corporations operating under municipal franchise do not generally plan on limiting their capital to the actual value of

* These reports as filed by the companies were taken from the books of the Traction Valuation Commission, through the courtesy of the Arnold Engineering Company.

their tangible property, although there is a rapidly growing sentiment that such corporations should be so limited, and it may be that only by so doing can they be compelled to render satisfactory service. However, adopting this basis as the most equitable one obtainable for the purposes of our investigation, we find that the net earnings of the Chicago City Railway Company were \$1,744,101.84 upon tangible property worth \$16,254,492, while the net earnings of the Union Traction Company were \$3,132,809.53 upon property valued at \$20,928,341.00. "Operating expenses" in these reports included all expenditures made during the year for construction, repairs, etc. Therefore, we find that if all the water were squeezed out of the Companies, that the Chicago City Railway Company, for the year covered by the report, would have been able to pay 6 per cent. dividends, and to pay to the city \$768,832.32, while the Chicago Union Traction Company would have been able to pay 6 per cent. dividends and turn into the coffers of the city \$1,877,109.07, both companies providing for renewals and repairs out of their operating expenses. In making this estimate, it must be remembered that it is impossible to ascertain whether the expenditures made during the year were a fair average of the amount necessary annually to maintain the roads at an efficient standard. No accurate estimate as to what percentage of gross receipts might justly be exacted from the companies can be compiled without the annual detailed reports of the companies covering a long period of time, and such reports are unobtainable. This estimate is submitted entirely as showing the amounts which the companies could have afforded to pay to the city during the year covered by the reports, had their capitalization been equal to the value of their physical property.

While it is practically impossible to arrive at any sound conclusion as to the probable net income of the companies, of which the city is to receive 55 per cent., it is impossible to make an estimate as to what the gross earnings will have to be after the completion of the three year rehabilitation period, in order that the city may receive any funds whatever from the proposed division.

The plan is,⁷ that after deducting certain items from the earnings, that 55 per cent. of the net receipts shall accrue to the city and 45 per cent. to the companies. A division of the net receipts is something entirely new in street railway history, although many cities have contracts with the companies requiring a division of gross receipts. A strong argument against a division of gross receipts is that under certain circumstances it tends to discourage the development of new territory, for if a company could barely secure a return on a certain line without paying such a tax it would probably wait until the return would be sufficient also to pay this tax before building the line. The greatest argument in favor of a division of gross receipts is that it is simple and easily ascertainable. Bion J. Arnold in the Arnold Report⁸ (1902) said: "It is clear to me that if money compensation is to be required by the city for franchise rights, the only equitable and just basis for compensation to the city should be based upon a percentage of gross receipts, whatever they may be, of each of the companies, payable annually." It is hoped that the plan for uniformity and auditing of accounts, as outlined in the ordinances, will render the ascertaining of the accuracy of the accounts a comparatively easy matter. The effort on the part of the city to superintend the accounts of the companies

⁷ As outlined on p. 97.

⁸ P. 38.

certainly deserves credit, but it remains to be seen whether the utmost care on the part of the city in supervising these accounts can prevent the companies from manipulating the items, in case they care to do so.

In making our estimate, let us add to the present \$50,000,000 valuation of the properties, the amount which the companies will be compelled to invest in rehabilitation, which is estimated at \$40,000,000.⁹ Upon this \$90,000,000 5 per cent. interest returns must be paid by the companies. The next item to be deducted from the gross earnings is the operating expenses, which there is no absolutely correct method of ascertaining. However, the Traction Valuation Commission in its report said: "A careful consideration of the conditions existing in Chicago led to the selection of 70 per cent. of the gross earnings as a fair percentage to be allowed for operating expenses."¹⁰ The recommendation of the Traction Valuation Commission, together with the following reports filed by the companies in the *Street Railway Investor's Guide* (1906), would indicate 70 per cent. as a fair estimate of operating expenses.

PERCENTAGE OF OPERATING EXPENSES TO TOTAL RECEIPTS

CHICAGO CITY RAILWAY COMPANY.

1902.....	67.6	1904.....	72.01
1903.....	72.23	1905.....	77.06

UNION TRACTION COMPANY.

1904.....	70.01
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It is true that many European municipalities, in granting franchises, fix the operating expenses at 50 per cent., but it is to be remembered that European franchises limiting operating expenses also generally regulate the

⁹ This is the amount generally agreed upon by the city and the companies as being the amount necessary to rehabilitate the systems according to the requirements of the new ordinances.

¹⁰ See p. 22, Traction Valuation Commission's Report.

hours of workmen and the wages paid to them, while in America the wages and other operating expenses are a great deal higher than in Europe. Inasmuch as the companies have up to the present charged all repairs to operating expenses, it seems fair to include in the 70 per cent. all allowances for repairs. Therefore, in making this estimate we shall not allow for the 6 per cent. repairs as provided for in the ordinances, but will merely add to the 70 per cent operating expense the 8 per cent. provided for renewals and depreciation. The charges for insurance, taxes, personal damages, etc., are included in operating expenses, while the expense of the Board of Engineers, after the period of immediate rehabilitation, will be so small as to justify the elimination of that item.

Add to the \$4,500,000 interest on the \$90,000,000 investment the 78 per cent. for operating expenses and renewals, and we have the amount necessary to be derived from the net earnings, before any division is to be made between the companies and the city. That is, the \$4,500,000 will represent 22 per cent. of the gross earnings, requiring the gross earnings to reach \$20,454,545 in order to pay returns on capital invested, operating expenses and renewals,—any amount over and above this to be divided between the city and the companies in the ratio of 45 per cent. to the companies and 55 per cent. to the city. Inasmuch as the gross income of the two companies is now about \$17,000,000 per year, and the average income of both companies for the entire 20 year period is estimated at about \$20,000,000, it will readily be seen that if the city is to receive any payment for the privileges it has bestowed upon the companies, the only hope for so doing is in forcing the operating expenses to a point considerably less than they have been in the past, thus lessening the amount to be deducted by

the companies before a division with the city takes place. It is urged by many that this will be done, upon the ground that the system, when reconstructed, will require less expenditures for operation than at present. However, what percentage of gross earnings will be required by the rehabilitated system for operating expenses, only time can tell.

\$90,000,000.00 Estimated investment at close of period of "immediate rehabilitation".

5 per cent. interest.

\$4,500,000.00 Interest returns on capital.

70 per cent. estimated operating expenses.

8 per cent. renewals.

\$4,500,000.00 plus 78 per cent. of earnings equals the amount necessary before any division of net receipts can take place.

1 per cent. = **\$204,545.45.**

100 per cent. = **\$20,454,545.00** equals the gross earnings necessary before any division of net receipts with the city, unless operating expenses and repairs are forced below 70 per cent.

CHAPTER XXI.

CONSOLIDATION.

Two decades ago most of our large cities were served by several separate horse railway companies. But with the introduction of mechanical traction came the tendency towards consolidation. To-day in many important cities all the independent companies have been brought together in one system. This is true of Brooklyn, Baltimore, Philadelphia, New Orleans, Milwaukee, Denver, and many other cities.

However, in Chicago the division of the city into three parts by the river, permitted the companies to maintain a system of separate territorial operation, until the consolidation of the North and West Sides into the Union Traction Company in 1899. Since that time this Company has divided territory with the Chicago City Railway Company, operating in the South Side. But with the passage of the new ordinances looms up the possibility of the consolidation of these two companies.

It was admitted during the negotiations for new ordinances that a consolidation of both companies was highly probable in the near future, and Mr. Wilson, representing the Chicago City Railway Company, in an address before the Committee on Local Transportation stated that he expected that that company would be called upon to expend \$75,000,000 for the acquisition and rehabilitation of the North and West Side lines.¹ Neither of the companies has as yet filed its acceptance of the ordinances. The Chicago Railways Company must accept within 120 days and the Chicago City Railway

¹ Proceedings of City Council, February 11, 1907, pp. 30-58.

Company is given 90 days. The Chicago Railways Company is now negotiating for the properties of the Union Traction Company, but the ordinances provide that in case the Chicago Railways Company shall fail to accept the ordinances within the time prescribed, that the Chicago City Railway Company is obliged to take over the North and West Side lines, and is given the street privileges in those divisions of the city.

However, the acceptance of these ordinances by both companies will be no barrier to consolidation which may take place at any time, either before or after the acceptance of the ordinances. Now that both companies are dominated by the same financial interests, and transfers are to be required throughout the city, with the exception of a part of the business district, we may reasonably expect that the desire for economy in management and cheaper operation will at no distant day cause a consolidation of the two companies. Such a move is to be greatly desired by the public, for it would place the city in a much more advantageous position in its efforts to regulate and control.

CHAPTER XXII.

MUNICIPAL OWNERSHIP.

To decide whether the street railway problem in Chicago has been closed for twenty years by the adoption of the new ordinances, it would be necessary not only to understand the demands which have been responsible for the municipal ownership sentiment so strongly manifested within the past few years, but also to know whether these demands will be satisfied by the companies in such a way that the public will accept as final the present plan of settlement in place of any system of municipal ownership which may be suggested.

It can hardly be denied by those most bitterly opposed to the principle of municipal ownership, that the greatest factor in producing the widespread municipal ownership sentiment in Chicago has been the continual abuse and neglect of the public by the street railway companies. Regardless of financial evils in the management of the companies, the public has from the beginning been most interested in securing an efficient service,—a consideration concerning which the companies appear to have been least mindful. Therefore, it was unavoidable that the interests of the two parties should clash. While a few may have favored municipal ownership as an abstract governmental principle, the masses of Chicago would never have taken up the cry had they not despaired of securing an adequate service by any other method. The rendering of the best possible service, consistent with fair returns upon capital invested, is the only purpose for which a public utility corporation, operating under municipal franchise, should be allowed to exist. The realiza-

tion of the fact that this end had been entirely lost sight of by the companies, in their desire for dividends, gave birth to the strong municipal ownership sentiment in Chicago.

Another factor which has at least served to give an impetus to the municipal ownership spirit already generated, has been the widespread publication of the experience of other cities in the field of municipal ownership. Especially is this true concerning the municipal ownership experiments of various cities in England and Germany, the results of which have been constantly proclaimed as being decidedly successful. The belief that this plan was being operated in other places undoubtedly led many to the conclusion that it would not be less successful if attempted in Chicago, this conclusion having been reached entirely regardless of the fact that the success of such a plan in foreign nations should not be considered decisive as to its probable results in Chicago, where governmental affairs and municipal conditions are so absolutely dissimilar.

It seems probable that the elections of the past do not accurately gauge the state of the public mind upon the proposition of municipal ownership. The majorities in favor of municipal ownership have doubtless included many votes cast in a spirit of anger and exasperation. On the other hand, that the majority of Chicago citizens are no longer desirous of securing municipal ownership is by no means indicated by the acceptance of the new ordinances, inasmuch as the alternative of immediate municipal ownership secured through agreeable methods or the adoption of the ordinances was not presented at the last election. The issues were either the adoption of the ordinances, or municipal ownership through the plan of condemnation, which plan was strenuously opposed on

the grounds that expensive litigation involving several years' time, during which no improvements would be made in the system, would follow its adoption.

It is also true that the argument that these ordinances were but stepping stones to municipal ownership undoubtedly influenced many voters, who really wished municipal ownership, but who were unfamiliar with all the provisions of the ordinances.

The slogan of those promoting the ordinances in the last campaign was "Good service guaranteed at once" and it was only by the widespread use of the promise of an immediate rehabilitation and the most improved street railway service in America, that the ordinances were passed. A greatly improved service is the thing most desired, and the ordinary citizen probably cares but little whether the street railways be operated under public or private ownership, if the transportation facilities provided him are satisfactory. Therefore, it seems safe to assert that the status of the municipal ownership in Chicago will depend largely upon the service rendered by the companies, under these ordinances.

If a rehearing on the validity of the \$75,000,000.00 ordinance is granted by the Supreme Court, and the Court reverses its decision, the possible methods which will be open to the city for acquiring the street railways will be:

(1) Purchase through a trustee company, the provision being made in the ordinances that a trustee company limited to 5 per cent. interest returns on the investment may take over the lines, all returns above these amounts to go to the city until it is able to purchase, the price to be paid by such a company to be the present valuation plus the cost of rehabilitation.

(2) The city may purchase the lines at any time, for

leasing to a private company or for any other purpose than municipal operation, the purchase price to be present valuation, plus the cost of rehabilitation, with a 20 per cent. bonus on the whole.

(3) The city may purchase at any time for municipal operation, the purchase price to be the present valuation plus the cost of rehabilitation.

While the passage of the ordinances does not legally deprive the city of the right of condemnation, which right was conferred upon the city by the Mueller law, there is a belief that not only the properties of the companies, but also these ordinances, as franchise rights, would have to be condemned and paid for by the city. The unlikelihood of securing the organization of a trustee company, with returns to capital limited to 5 per cent., and the great public protest which would inevitably be raised against the city paying a 20 per cent. bonus upon the present valuation of the property, would indicate the most probable plan of the city acquiring the lines as being a purchase for municipal operation. The Mueller law requires a three-fifths' majority for municipal operation, and the proposition has as yet failed to receive the required majority. Therefore, if the \$75,000,000.00 ordinance is held to be valid, any municipal ownership agitation in the future will no doubt assume the nature, either of obtaining the necessary three-fifths' majority for operation, or of securing enabling legislation from the legislature which will permit municipal operation upon a majority vote.

On the other hand, if a rehearing is not given, and the present verdict of the Court is accepted as final, there appears at present to be no way open by which the city could acquire the lines, without further legislation. The city could never expect to purchase the system from its

share of net receipts for many years, and the possibility of securing a *pro bono publico* corporation to take over the lines with a 5 per cent. limitation on capital is remote. Therefore, if the decision upon the \$75,000,000.00 ordinance is not reversed, it seems probable that any municipal ownership agitation in the future will direct itself towards securing a constitutional amendment, giving the power to cities to increase their indebtedness, for the acquisition of various utilities.

The public demands an immediate betterment of the service. That improved conditions would accompany municipal ownership is by no means certain, but that such a system could produce conditions any worse than those which have prevailed in Chicago for the last few years seems impossible. The agitations of late years have made the public conscious of its own powers in these matters as never before, and already the companies have awakened to a realization of the fact that the largest possible profits and the cheapest possible service will fail to promote their own interests. Therefore, while the city may be unable by law to enforce many of the good service features of the ordinances, the desire on the part of the companies to refrain from arousing the municipal ownership propaganda may prove an effective means in securing an efficient service.

APPENDIX A.

PROVISIONS OF GENERAL CITY AND VILLAGE LAW OF 1872.

Approved July 10, 1872.

In force July 1, 1872.

"Section 1. The city council in cities . . . shall have the following powers:

"Twenty-fourth. To permit, regulate or prohibit the locating, constructing or laying a track of any horse railroad in any street, alley or public place; but such permission shall not be for a longer time than twenty years."

"Forty-second. To license, tax and regulate hackmen, draymen, omnibus drivers, carters, cabmen, porters, expressmen, and all others pursuing like occupations, and to prescribe their compensation."

"Ninety-sixth. To pass all ordinances, rules, and make all regulations, proper or necessary, to carry into effect the powers granted to cities or villages, with such fines or penalties as the city council or board of trustees shall deem proper: Provided, no fine or penalty shall exceed \$200.00, and no imprisonment shall exceed six months for one offense.

APPENDIX B.

PART I.

STATUS OF CHICAGO CITY RAILWAY COMPANY'S FRANCHISES AS CLAIMED BY THE CITY OF CHICAGO.

Franchises Expired.

On Archer Avenue,	
Halstead	to Western Ave.
Western Ave.	to 39th St.
On Ashland Avenue,	
Archer Ave.	to 39th St.
39th St.	to 55th St.
55th St.	to 63rd St.
63rd St.	to 69th St.

On Canal Street, Archer Ave.	to 29th St.
On Cottage Grove Avenue, City Limits (39th St.)	to S. end of Avenue.
On Dearborn Street, 20th St.	to 21st St.
On Eighteenth Street, State St.	to Wabash Ave.
On 41st Street, W. line of State St.	to E. line of Cottage Grove Ave.
On 47th Street, Halstead St.	to State St.
Halstead St.	to Ashland Ave.
W. from Ashland Ave.	
On 51st Street, State St.	to Indiana Ave.
Indiana Ave.	to Grand Blvd.
On 55th Street, W. line of State St.	to E. end of street.
On Halstead Street, 29th St.	to River.
63rd St.	to 69th St.
On Indiana Avenue, City Limits	to 41st St.
39th St.	to 51st St.
On Jefferson Street, 55th St.	to S. line of Willow St.
On Madison Street, Wabash Ave.	to Michigan Ave.
On Michigan Avenue, Madison St.	to Randolph St.
On Randolph Street, Michigan Ave.	to Wabash Ave.
On Root Street, State St.	to Stock Yards.
On 61st Street, State St.	to Wentworth Ave.
State St.	to 1000 Ft. E. of S. Park Ave.
Viaduct between State and Madison Ave.	Wentworth. to 60th.

On 63rd Street, W. line of State St. Halstead St. Ashland Ave.	to E. end of River. to Wentworth Ave. to Halstead St.
On 69th Street, Vincennes	to Halstead St.
On State Street, 22nd St. City Limits 31st St. W. 39th St. 41st St. 55th St. 63rd St.	to City Limits. to S. end of street. to 39th St. to 55th St. to 61st St. to 63rd St. to Vincennes Rd. (West single track.
Stock Yards Dummy. Streets on any common highway except Hyde Park and Lake Avenues. Applies only to actual extension from Willow Street to State Line.	
On 21st Street, State St.	to Dearborn St.
On 29th Street, Canal St.	to Butler St.
On 31st Street, Pitney Ave. 31st St.	to Lake Park Ave. to Throop St.
On 35th Street, Cottage Grove Ave.	to Stanton Ave.
On 38th Street, Archer Ave.	to Kedzie Ave.
On 39th Street, State St. Wentworth Ave. Cottage Grove Ave.	to Wentworth Ave. to Halstead (S. Single Track). to State St.
On Throop Street, 31st St.	to 39th St. (No such franchise.)
On VanBuren Street, State St.	to 50 ft. E. of E. line of Wabash Ave.
On Vincennes Avenue, State St. 69th St.	to 69th St. to 79th St.

- On Wabash Avenue,
 Randolph St. to Madison St.
 Wabash Ave. Loop.
 Madison St. to Lake St.
- On Wallace Street,
 26th St. to 31st St.
 Butler St. from 29th to 39th St.
- On Westworth Avenue,
 61st St. to 63rd St.
 39th St. to 63rd St.
 63rd St. to Vincennes.
- On Willow Street,
 W. line of Jefferson St. to E. line of street.

Franchises Operative until Purchase.

- On Archer Avenue,
 State St. to City Limits (Halstead St.).
- On Clark Street,
 Randolph St. to Polk St.
 Polk St. to 22nd St.
- On Cottage Grove Avenue,
 22nd St. to 31st St.
- On 18th Street,
 Wabash Ave. to Indiana Ave.
- On Indiana Avenue,
 18th St. to 22nd St.
 22nd St. to 39th St.
- On State Street,
 Lake St. to City Limits (31st St.).
 Lake St. to Chicago River.
 Lake St. to the River.
- On 22nd Street,
 State St. to Cottage Grove Ave.
- On Van Buren Street,
 State St. to SW. plank road (Ogden Ave.).

Franchises Expiring Latter Part of 1906.

- On Cottage Grove Avenue,
 39th St. to 67th St. (Nov. 8).
- On 55th Street,
 Cottage Grove Ave. to Lake Ave. (Nov. 8).

Franchises Expiring in 1907.

On Centre Avenue, 35th St.	to 31st St.
55th Street Loop. Expires with the street forming it.	
On 43rd Street, I. C. R. R.	to State St.
On Jefferson Avenue, 55th St.	to Private right of way between 56th and 57th Sts.
On Lake Avenue, From above right of way	to 55th St.
On Pitney Court, Archer Ave.	to Chicago & Alton Tracks.
On 61st St. Cottage Grove Ave.	to 100 ft. E. of E. line of South Park Ave.
On 63rd Street, I. C. R. R.	to Cottage Grove Ave.
On State Street, 63rd St.	to Vincennes Road (East Single track).
On 22nd Street, State St.	to River.
On 26th Street, Halstead St.	to Cottage Grove Ave.
On 35th Street, State St.	to Centre Ave.
On 39th Street, Wentworth Ave.	to Halstead St.

Franchise Expiring in 1909.

On Cottage Grove Avenue, 67th St.	to L. S. & M. S. R. R.
68th St.	to 71st St.
On Keefe Avenue, Anthony Ave.	to So. Chicago Ave.
On Rhodes Avenue, So. Chicago Ave.	to 68th St.
On 68th Street, Rhodes Ave.	to Cottage Grove Ave.

- On 69th Street,
Vincennes Ave. to Anthony Ave.
- On South Chicago Avenue,
Cottage Grove Ave. to I. C. R. R.

Franchise Expiring in 1912.

- On 47th Street,
State St. to Cottage Grove Ave.
Ashland Ave. to S. W. Boul.
- On Grace Avenue,
62nd St. to 63rd St.
- On Madison Avenue,
64th St. to 63rd St.
- On 61st Street,
Cottage Grove Ave. to Madison Ave.
- On 62nd Street,
Stony Island Ave. to Grace Ave.
- On 63rd Street,
I. C. R. R. to Stony Island Ave.
63rd St. Loop.
- On 64th Street,
Stony Island Ave. to Madison Ave.
- On Stony Island Avenue,
63rd St. to 62nd St.
63rd St. to 64th St.
- On 35th Street,
State St. to Rhodes Ave.
California Ave. to Centre Ave.

Franchise Expiring in 1913.

- On 63rd Street,
Ashland Ave. to Central Park Ave.
Central Park Ave. to Hyman Ave.

Franchise Expiring in 1914.

- On Centre Avenue,
47th St. to 63rd St.
63rd St. to 75th St.
- On Halstead Street,
69th St. to 79th St.
- On 63rd Street,
Cottage Grove Ave. to State St.
Cottage Grove Ave. to C. R. I. & P. R. R.
- On Wallace Street,
39th St. to Root St.

On Alley	
Loop	to Limits barns.
Lincoln	to Wrightwood barns.
On Armitage	
Milwaukee	to Washtenaw.
Washtenaw	to California.
On Ashland	
Erie	to North Avenue.
North Ave.	to Clyborne.
Belmont	to Graceland.
Graceland	to Sulzer.
On Augusta,	
Elston	to N. 40th.
On Austin,	
Desplaines	to Centre.
On Belmont,	
Robey	to Western.
On Blackhawk,	
Holt	to Noble.
On Blue Island,	
C. B. & Q. R. R.	to 22nd St.
22nd St.	to Western.
On California,	
Chicago	to Division.
North	to Armitage.
On Canalport,	
Canal	to Halstead.
On Canal	
Lake	to Harrison.
Harrison	to C. B. & Q.
C. B. & Q.	to Canalport.
On Catharine (15th St.),	
Blue Island	to Robey.
On Centre Street,	
Clark	to Lincoln.
On Centre Street,	
Lincoln	to Racine.
On Centre Avenue,	
Adams	to 21st.
Austin	to Erie.

On Chicago,	
Rush	to Clark.
Clark	to Larabee.
Larabee	to River.
River	to Milwaukee.
Milwaukee	to Leavitt
Leavitt	to Western.
Western	to California.
On Clark	
Washington	to Randolph.
Randolph	to River.
River	to N. Water.
N. Water	to Illinois.
Illinois	to Fullerton.
Fullerton	to Limits Station.
Limits	to Diversey plus 40 rds.
Diversey plus 40 rds.	to Devon.
On Clinton,	
Harrison	to 12th (Forfeited for non-use).
Randolph	to Milwaukee.
On Clyborne,	
Division	to Fullerton.
On Clyborne Pl.	
Ashland	to Wood.
On Custom House Place,	
From 100 rds.	to 350 rds. N. of Clark.
On Dearborn,	
Michigan	to Kinzie.
On Desplaines,	
Sebor	to Harrison.
Harrison	to Van Buren.
Van Buren	to Adams.
Adams	to Randolph.
Randolph	to Lake.
Lake	to Milwaukee.
Milwaukee	to Austin.
On Division.	
State	to Clark.
Clark	to Clyborne.
Milwaukee	to 200 ft. W. of California.
On 18th St.,	
Halstead	to Leavitt.
Leavitt	to Oakley.

On Elm, State	to Clark.
On Erie, Centre	to Ashland.
On Evanston, Diversey Graceland	to Irving. to 40 ft. N. of Solzer.
On Eugenie, Larabee	to Wells.
On 5th Avenue, Randolph	to Middle of River.
On 4th Avenue, 250 ft. near Polk.	
On Franklin, Chicago Harrison	to Division. to Washington.
On Fullerton, Connection with shops. (No grant.)	
On Garfield, Lincoln	to Racine.
On Graceland, Evanston Clark	to Clark. to Ashland.
On Green Bay Road, Chicago	to Wolcott (State St.).
On Halstead, River Lake Milwaukee Middle N. Branch Clyborne Fullerton	to Harrison. to Milwaukee. to Middle of N. Branch. to Clyborne. to Fullerton. to 200 rds. N. E. line of Clark.
On Harrison, State Canal Clinton Desplaines Ogden	to Canal. to Clinton. to Desplaines. to Ogden. to Western.
On Holt, Blackhawk	to North.
On Illinois, Wells	to Market.

On Indiana,	
Halstead	to Western.
Armitage	to Central.
On Jefferson,	
15th Place	to Van Buren. (Forfeited for
non-use.)	
On Lake,	
Wabash	to State.
State	to Market.
Market	to Desplaines.
Desplaines	to Union Park.
Western	to Rockwell.
Rockwell	to Homan.
Homan	to Crawford.
On Larabee,	
Chicago	to Lincoln.
On LaSalle St.	
Illinois	to Monroe.
On LaSalle Ave.,	
Monroe	to Jackson.
On Leavitt,	
Blue Island	to 18th St.
Indiana	to Chicago.
On Lincoln,	
Centre	to Larabee.
Larabee	to Fullerton.
Fullerton	to Wrightwood.
Wrightwood	to Belmont.
On Lincoln Street,	
Milwaukee	to Webster.
On Linden,	
Larabee	to Clark.
On Madison,	
Western	to Rockwell.
Homan	to Hamlin.
Hamlin	to 40th St.
On Market,	
Madison	to Lake (lapsed for non-constr.).
Michigan	to Illinois.
Illinois	to Chicago.
Chicago	to Division.

On Meagher, Canal	to Jefferson. (Forfeit for non- use.)
On Michigan Avenue, Washington	to Adams.
On Michigan Street, Rush	to Clark.
Wells	to Market.
On Milwaukee, Lake	to Clinton.
Clinton	to Desplaines.
Desplaines	to Indiana. (No grant.)
Indiana	to North
North	to Western.
Western	to Armitage.
On Noble, Milwaukee	to Blackhawk.
On North, Western	to California.
On Ogden, Randolph	to Madison.
Madison	to Western.
Western	to 40th St.
On O'Neil, Halstead	to Car Barns.
On Polk, 5th St.	to Canal.
On Racine, Clybourne	to Webster.
Webster	to Fullerton.
On Randolph, Michigan	to Wabash.
Wabash	to State.
On Rush, Michigan	to Chicago.
On Sangamon, Adams	to Austin.
On Seber, Desplaines	to Halstead.
On Sedgwick, Chicago	to Division.
Division	to Centre.
Centre	to Clark.

On State,	
Washington	to Randolph. (Only right to operate; no franchise.)
Randolph	to Lake.
Lake	to Middle of River.
Middle of River	to Michigan.
Michigan	to Rush.
Rush	to Elm.
Elm	to Division.
On 12th Street,	
Wabash	to State.
Canal	to Blue Island.
Blue Island	to Ashland.
Ashland	to Ogden.
Ogden	to Western.
Western	to 40th.
Van Buren Street Tunnel—covered by Tunnel Lowering Ordinances.	
On 21st Street,	
Centre	to Western.
On Van Buren,	
Western	to Kedzie.
On Washington,	
Michigan	to Wabash.
Wabash	to Desplaines.
On Webster,	
Lincoln	to Racine.
On Wells,	
Middle of River.	to N. Water St.
N. Water	to Illinois.
Illinois	to Division.
Division	to Clark.
On Western,	
12th	to Harrison.
Van Buren	to Madison.
Madison	to Lake. (No grant.)
On Wrightwood,	
Lincoln	to Barns.

Franchises Expiring in 1907.

On Belmont,	
Lincoln	to Robey.

On Dearborn, Kinzie	to Adams.
Van Buren	to Polk.
On Division, Clyborne	to Milwaukee.
On Kinzie, State	to Market.
On Market, Kinzie	to Michigan.
On Monroe, LaSalle	to Dearborn.
On North, Clark	to Holt.
Holt	to Ashland.
Ashland	to Milwaukee.
On Robey, Belmont	to Roscoe.
On Roscoe, Robey	to Western.

Franchises Expiring in 1908.

On Clybourn, Fullerton	to Belmont.
On 5th St., 12th	to Polk.
On Jefferson, Madison	to Washington.

Franchises Expiring in 1909.

On Halstead, 200 ft. N. of E. line of Clark	to Grace.
On Sheffield, Fullerton	to Lincoln.
Lincoln	to Clark.
On Taylor 5th	to Western.

Franchise Expiring in 1910.

On Lawndale 33rd	to Ogden.
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Franchises Expiring in 1911.

On Lake, 40th	to 48th St.
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On North,	
California	to C. M. & St. P. R. R.
C. M. & St. P. R. R.	to W. 40th Ave.
W. 40th Ave.	to 46th.

Franchises Expiring in 1912.

On Ashland,	
Blue Island	to 12th St.
Lake	to Erie.
On Chicago,	
California	to Grand.
On Colorado,	
Madison	to W. 40th.
On Crawford,	
Grand	to North.
On Dearborn,	
Adams	to Van Buren
On 18th St.,	
State	to Halstead.
On 14th St.,	
Canal	to Robey.
On Indiana,	
Western	to W. North.
On Kedzie,	
12th St.	to Madison.
On Milwaukee,	
Armitage	to Fullerton.
On Paulina,	
12th St.	to Lake.
On Robey,	
Blue Island	to Milwaukee.
On State,	
Madison	to Washington (Single track).
On Western,	
Blue Island	to 12th St.
Harrison	to Van Buren
Lake	to Milwaukee.

Franchises Expiring in 1914.

On Armitage,	
California	to Kedzie.
Kedzie	to Keeney.
Kenney	to 44th St. (N.).
N. 44th St.	to Grand.

On Fullerton, Lincoln Racine	to Racine. to Milwaukee.
On Milwaukee, Fullerton Pipe Line	to Logan Square. Larabee Gas House.
On Southport, Clybourne Place Clyborne Ave. Lincoln	to Clyborne Ave to Lincoln to Clark.

Franchises Expiring in 1915.

On Chicago, Grand	to Kedzie
On Erie, E. bank of River	to Sangoman.
On Harrison, Western	to Kedzie.
On Indiana, State	to Halstead.
On S. Morgan, 31st St.	to 39th St.
On Sangoman, Austin	to Erie.
On 31st St. Laurel	to Main.
On Throop, Taylor 21st St.	to 21st St. to Main
On 12th, 40th St.	to 46th St.
On 21st, Halstead Western	to Centre. to Douglass Pk. Boul.
On 26th St., Western	to 40th St.
On Western, Milwaukee	to Elston

Franchises Expiring in 1916.

On Armitage, Ellston	to Milwaukee.
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On Ashland 31st St.	to Blue Island (Not built).
On California, Ogden Division Armitage	to Kinzie. to North. to Elston.
On Illinois, Clark	to Wells.
On Kedzie, Ogden Madison	to 12th St. to Chicago.
On Robey, Milwaukee	to Elston.

Franchises Expiring in 1921.

On Alley, Western	to Power House.
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List of Franchises when Expiration is Doubtful.
None.

Franchises Operative until Purchase.

On Blue Island, Harrison	to C. B. & Q.
On Bryan, Randolph	to Lake.
On Clinton, Madison Madison	to Harrison. to Randolph.
On 5th St., Polk Van Buren	to Van Buren. to Randolph.
On Halstead, Harrison	to Lake.
On Lake, Union Park Robey	to Robey. to Western.
On Madison, State Rockwell	to Western. to Homan.
On North, Robey	to Western.

On Randolph, State	to Dearborn.
Dearborn	to LaSalle.
LaSalle	to Union Park.
On 12th Street, State	to Canal.
On Van Buren, State	to Clark.
Clark	to Ogden.
Ogden	to Western.

PART III.

STATUS OF CHICAGO UNION TRACTION COMPANY'S FRANCHISES AS CLAIMED
BY THE COMPANY.*Franchises Expired.*

On Adams Street, Michigan Ave.	to Clark St.
Clark	to 500 ft. W. of Desplaines.
500 ft. W. of Desplaines	to Centre Ave
On Alley, Loop at Limits Barn	
Lincoln	to Wrightwood Barns.
On Armitage Avenue, Milwaukee Ave.	to Washtenaw.
Washtenaw St.	to California Ave.
On Ashland Avenue, Erie	to North Ave.
N. Ave.	to Clyborne Ave.
Belmont Ave.	to Graceland.
Graceland	to Sulzer.
On Augusta Street, Ellston Ave.	to N. 40th Ave.
On Austin, Desplaines	to Centre Ave.
On Belmont, Robey	to Western.
On Blackhawk, Holt	to Noble.
On California, Chicago	to Division.
North Ave.	to Armitage Ave.

On Canal Street, Lake	to Harrison
On Catharine Street, Blue Island Ave.	to Robey St.
On Centre Street, Clark Lincoln St.	to Lincoln Ave. to Racine Ave.
On Centre Avenue, Adams Austin	to 21st. to Erie.
On Chicago Avenue, Rush Clark Larabee River Leavitt Western	to Clark. to Larabee. to River. to Milwaukee. to Western to Clybourne Ave.
On Clark Street, River N. Water Illinois Fullerton Limits Station Diversey	to N. Water. to Illinois. to Fullerton. to Limits Station. to Diversey. to Devon.
On Clybourne Avenue, Division Ashland	to Fullerton. to Wood St.
On Custom House Place, From 100 ft. to 350 ft. N. of Clark.	
On Dearborn Street, Michigan St.	to Kinzie.
On Desplaines Street, Sebor Harrison Van Buren Adams Randolph Lake Milwaukee	to Harrison. to Van Buren. to Adams. to Randolph. to Lake. to Milwaukee to Austin.
On Division Street, State Clark	to Clark. to Clybourne Ave.

On Elm, State	to Clark.
On Erie, Centre	to Ashland.
On Evanston Avenue, Diversey	to Irving Pk. Boul.
Graceland	to 40 ft. N. of Sulzer.
On Eugenie Street, Larabee	to Wells.
On 4th Avenue, From 100 ft. to 300 ft. N. of Polk St.	
On Franklin Street, Chicago	to Division.
On Franklin Street, Harrison St.	to Washtenaw.
On Fullerton Avenue, Connection with shops. (No grant.)	
On Garfield Avenue, Lincoln	to Racine.
On Graceland Avenue, Evanston Ave.	to Clark.
Clark	to Ashland.
On Green Bay Road, (Adjoining Rush St.)	
Chicago Ave.	to Wolcott (State St.).
On Halstead Street, Milwaukee Ave.	to Middle of N. Branch.
Middle N. Branch	to Clybourne Ave.
Clybourne Ave.	to Fullerton.
Fullerton	to 200 ft. W. of E. line of Clark.
On Harrison Street, State	to Canal.
Ogden	to Western.
On Holt Street, Blackhawk	to North Avenue.
On Illinois Street, Wells	to Market.
On Indiana Street (Grand), Armitage Ave.	to Central Ave.
On Jefferson Avenue, Meagher St.	to Van Buren. (Forfeited for non-use.)

On Larabee, Chicago	to Lincoln.
On LaSalle Street and Avenue, Illinois Monroe	to Monroe. to Jackson Blvd.
On Lincoln Avenue, Centre St. Larabee Fullerton Wrightwood	to Larabee. to Fullerton. to Wrightwood. to Belmont.
On Lincoln Street, Milwaukee	to Webster. (Lapsed for non- construction.)
On Linden Street, Larabee	to Clark.
On Madison Street, Hamlin	to 40th Ave.
On Market Street, Madison Michigan Illinois Chicago Ave.	to Lake. to Illinois. to Chicago Ave. to Division St.
On Meagher, Canal St.	to Jefferson. (Forfeited for non- use.)
On Michigan Avenue, Washington	to Adams St.
On Michigan Street, Rush Wells	to Clark. to Market.
On Milwaukee Avenue, Western Ave.	to Armitage Ave.
On Noble Street, Milwaukee Ave.	to Blackhawk.
On North Ave. Milwaukee Ave.	to Western.
On Polk Street, 5th Ave.	to Canal St.
On Racine Avenue, Clybourne Ave. Webster	to Webster. to Fullerton.

On Rush Street, Michigan Ave.	to Chicago Ave.
On Sangamon Street, Adams	to Austin.
On Sebor Street, Desplaines	to Halstead.
On Sedgwick Street, Chicago Ave.	to Division St.
Division	to Centre.
Centre	to Clark.
On State, Middle of River	to Michigan St.
Michigan St.	to Rush.
Rush	to Elm.
Elm	to Division.
On 12th Street, Western Ave.	to 40th Ave.
Van Buren St. Tunnel, Covered by Tunnel Lowering Ordinance.	
On 21st Street, Centre St.	to Western Ave.
On Washington Street, Michigan Ave.	to Wabash Ave.
Wabash	to Desplaines St.
On Webster Avenue, Lincoln Ave.	to Racine Ave.
On Western Avenue, 12th St.	to Harrison St.
Madison St.	to Lake St. (No grant.)
On Wrightwood Avenue, Lincoln Ave.	to Barns.

Status of Franchises Operative until Purchase.

(Upon 6 months' notice.)

On Blue Island Avenue, Harrison St.	to C. B. & Q.
Rebecca St.	to C. B. & Q.—22nd St.
22nd St.	to Western Ave.
On Bryan, Randolph	to Lake.
On Canal Street, Harrison	to C. B. & Q. tracks.
C. B. & Q. tracks	to Canalport Ave.

On Canalport Avenue, Canal St.	to Halstead St.
On Chicago Avenue, Milwaukee Ave.	to Leavitt.
On Clark Street, Washington St. Randolph	to Randolph. to Middle of River.
On Clinton Street, 12th St. Madison Randolph	to Madison. to Randolph. to Milwaukee Ave.
On Division Street, Milwaukee Ave.	to 200 ft. W. of California Ave.
On Eighteenth Street, Halstead St. Leavitt	to Leavitt. to Oakley.
On 5th Avenue, Polk Van Buren Randolph	to Van Buren. to Randolph. to Middle of River.
On Halstead, S. Branch of River Harrison Lake	to Harrison St. to Lake. to Milwaukee Ave.
On Harrison Street, Canal Clinton	to Clinton. to Ogden
On Indiana Street (Grand Avenue), Halstead St.	to Western.
On Lake Street, Wabash State Market Desplaines St. Union Pk. Robey Western	to State. to Market. to Desplaines St. to Union Pk. to Robey. to Western. to W. 40th Ave.
On Leavitt Street, 18th St. Chicago Ave.	to Blue Island Ave. to Indiana St.

On Madison Street, State St. Western Ave. Rockwell St. Homan Ave.	to Western Ave. to Rockwell St. to Homan Ave. to Hamlin Ave.
On Milwaukee Avenue, Desplaines St. Clinton St. Desplaines St. Indiana St. North Ave.	to Clinton St. to Lake St. to Indiana St. to North Ave. to Western Ave.
On North Ave. Robey St. Western Ave.	to Western Ave. to California Ave.
On Ogden Avenue, Randolph St. Madison St. Western Ave.	to Madison St. to Western Ave. to W. 40th Ave.
On O'Neill Street, Halstead St.	to Car Barns.
On Randolph Street, Michigan Ave. Wabash Ave. State St. Dearborn St. LaSalle St.	to Wabash Ave. to State St. to Dearborn St. to LaSalle St. to Union Pk.
On State Street, Madison St. Washington St. Randolph St. Lake St.	to Washington St. to Randolph St. to Lake St. to Middle of River.
On 12th Street, Wabash Ave. State St. Canal St. Blue Island Ave. Ashland Ave. Ogden Ave.	to State St. to Canal St. to Blue Island Ave. to Ashland Ave. to Ogden Ave. to Western Ave.
On Van Buren Street, State St. Clark St. Ogden Ave. Western Ave.	to Clark St. to Ogden Ave. to Western Ave. to Kedzie Ave.

On Wells Street,	
Middle of River	to North Water St.
North Water St.	to Illinois St.
Illinois St.	to Division St.
Division St.	to N. Clark St.
On Western Avenue,	
Van Buren St.	to Madison St.

Franchises Expiring in 1907.

On Belmont Avenue,	
Lincoln Ave.	to Robey St.
On Dearborn Street,	
Kinzie	to Adams St.
Van Buren	to Polk St.
On Division Street,	
Clyborn Ave.	to Milwaukee Ave.
On Kinzie Street,	
State St.	to Market St.
On Market Street,	
Kinzie St.	to Michigan St.
On Monroe Street,	
LaSalle St.	to Dearborn St.
On North Avenue,	
Clark	to Holt St.
Holt St.	to Ashland Ave.
Ashland Ave.	to Milwaukee Ave.
On Robey Street,	
Belmont Ave.	to Roscoe St.
On Roscoe Street,	
Robey St.	to Western Ave.

Franchises Expiring in 1908.

On Clyborn Avenue,	
Fullerton Ave.	to Belmont Ave.
On 5th Avenue,	
12th St.	to Polk St.
On Jefferson Avenue,	
Madison St.	to Washington St.
On Taylor Street,	
Approach.	

Franchises Expiring in 1909.

On Halstead Street,	
200 ft. N. of E. line of	
Clark St.	to Grace.

On Sheffield Avenue,	
Fullerton Ave.	to Lincoln Ave.
Lincoln Ave.	to Clark St.
On Taylor Street,	
5th Ave.	to Western Ave.

Franchises Expiring in 1910.

On Lawndale Avenue,	
33rd St.	to Ogden Ave.

Franchises Expiring in 1911.

On Lake St.	
40th Ave.	to 48th Ave.
On North Avenue,	
California Ave.	to Chicago M. & St. P.
C. M. & St. P.	to W. 40th Ave.
W. 40th Ave.	to W. 46th Ave.

Franchises Expiring in 1912.

On Ashland Avenue,	
Blue Island Ave.	to 12th St.
Lake St.	to Erie St.
On Chicago Avenue,	
California Ave.	to Grand Ave.
On Colorado Avenue,	
Madison St.	to W. 40th Ave.
W. 40th Ave.	to W. 48th Ave. (Not built.)
On Crawford Avenue,	
Grand Ave.	to North Ave.
On Dearborn Street,	
Adams St.	to Van Buren St.
On 18th Street,	
State St.	to Halstead St.
On 14th Street,	
Canal St.	to Robey St.
On Indiana Street,	
Western Ave.	to W. 40th Ave.
On Kedzie Avenue,	
12th St.	to Madison St.
On Milwaukee Avenue,	
Armitage Ave.	to Fullerton Ave.
On Paulina Street,	
12th St.	to Lake St.

- On Robey Street,
Blue Island Ave. to Milwaukee Ave.
- On Western Ave.
Blue Island Ave. to 12th St.
Harrison St. to Van Buren St.
Lake St. to Milwaukee Ave.

Franchises Expiring in 1914.

- On Armitage Avenue,
California Ave. to Kedzie Ave.
Kedzie Ave. to Keeney Ave.
Keeney Ave. to N. 44th Ave.
N. 44th Ave. to Grand Ave.
- On Fullerton Avenue,
Lincoln Ave. to Racine Ave.
Racine Ave. to Milwaukee Ave.
- On Milwaukee Avenue,
Fullerton Ave. to Logan Sq.
- Pipe Line
Larabee Gas House.
- On Southport Avenue,
Clybourne Pl. to Clybourne Ave.
Clybourne Ave. to Lincoln St.
Lincoln St. to Clark St.

Franchises Expiring in 1915.

- On Chicago Avenue,
Grand Ave. to Kedzie Ave.
- On Erie Street,
E. bank of River to Sangamon St.
- On Harrison Street,
North Ave. to Kedzie Ave.
- On Indiana Street,
State St. to Halstead St.
- On Morgan Street (formerly Laurel),
31st St. to 39th St.
- On Sangoman Street,
Austin Ave. to Erie St.
- On 31st Street,
Laurel St. to Main St.
- On Throop Street,
Taylor St. to 21st St.
21st St. to Main St.

- On 12th Street,
40th Ave. to 46th Ave.
- On 21st Street,
Halstead St. to Centre Ave.
North Ave. to Douglass Pk. Boul.
- On 26th Street,
Western Ave. to 40th Ave.
- On Western Avenue,
Milwaukee Ave. to Elston Ave.

Franchises Expiring in 1916.

- On Armitage Avenue,
Elston Ave. to Milwaukee Ave.
- On Ashland Avenue,
31st St. to Blue Island Ave.
- On California Avenue,
Ogden Ave. to Kinzie St.
Division St. to North Ave.
Armitage Ave. to Elston Ave.
- On Illinois Street,
Clark St. to Wells St.
- On Kedzie Avenue,
Ogden Ave. to 12th St.
Madison St. to Chicago Ave.
- On Robey Street,
Milwaukee Ave. to Elston Ave.

Franchises Expiring in 1921.

- On Alley,
Western Ave. to Power House.

PART IV.

STATUS OF THE CHICAGO CITY RAILWAY COMPANY'S FRANCHISES AS
CLAIMED BY THE COMPANY.*Franchises Expired.*

- On Cottage Grove Avenue,
City Limits (39th St.) to S. end of Avenue.
- On 41st Street,
W. line of State St. to E. line of Cottage Grove Ave.
- On 47th Street,
West from Ashland Ave.

- On 51st Street,
State St. to Indiana Ave.
Indiana Ave. to Grand Boul.
- On Highways,
In town of Lake.
In Cook Co.
- On Indiana,
City Limits (39th St.) to 41st St.
39th St. to 51st St.
- On Jefferson Street,
55th St. to So. line of Willow St.
- On Michigan Avenue,
Madison to Randolph St.
- On 61st Street,
State St. to 1000 ft. E. of So. Park Ave.
Madison Ave. to 60th St.
- On 63rd Street,
W. line of State St. to E. end of Street.
- On Randolph Street,
Michigan Ave. to Wabash Ave.
- On State Street,
City Limits to South end of street.
31st St. to 39th St.
39th St. to 55th St.
55th St. to 63rd St.
- Streets on any common highway except Hyde Park or Lake Avenue.
- Applies only to actual extension from Willow St. to State Line.
- On 29th Street,
Cottage Grove Ave. to State St.
- On Throop Street,
31st St. to 39th St.
- On Van Buren Street,
State St. to 50 ft. E. of E. line of Wabash Ave.
- On Wabash Avenue,
Randolph St. to Madison St.
Wabash Ave. Loop.
- On Wentworth,
61st St. to 63rd St.
63rd St. to Vincennes Ave.
- On Willow Street,
W. line of Jefferson St. to E. end of St.

Franchises Operative until Purchase.

On Archer Avenue, State St.	to City Limits (Halstead St.).
Present terminus of tracks (Halstead St.).	to Western Ave.
Western Ave.	to 39th St.
On Ashland Avenue, Archer Ave.	to 39th St.
39th St.	to 55th St.
55th St.	to 63rd St.
63rd St.	to 69th.
On Canal Street, Archer Ave.	to 39th St.
On Center Avenue, 35th St.	to 31st St.
On Clark Street, Randolph St.	to Polk St.
Polk St.	to 22nd St.
On Cottage Grove Avenue, 22nd St.	to 31st St.
On 18th Street, State St.	to Wabash Ave.
Wabash Ave.	to Indiana Ave.
On 47th Street, Halstead St.	to State St.
Halstead St.	to Ashland Ave.
On Halstead Street, 39th St.	to River.
63rd St.	to 69th St.
On Indiana Avenue, 18th St.	to 22nd St.
22nd St.	to 39th St.
On Madison Street, Wabash Ave.	to Michigan Ave.
On Pitney Avenue, Archer Ave.	to Chicago & Alton tracks.
On Root Street, State St.	to Stock Yards.
On 61st Street, State St.	to Wentworth Ave.
Permission to use viaduct between State and Wentworth.	

On 63rd Street, Halstead St. Ashland Ave.	to Wentworth Ave. to Halstead St.
On 69th Street, Vincennes Ave. Halstead St. Ashland Ave.	to Halstead St. to Ashland Ave. to Leavitt St.
On 79th Street, Vincennes Ave.	to Halstead St.
On State Street, Lake St. Lake St. Lake St. 22nd St. 41st St. 63rd St. track.)	to City Limits (31st St.). to River. to Chicago River. to City Limits. to 61st St. to Vincennes Rd. (West single
Stock Yards Dummy.	
On 21st St. State St. Canal St.	to Dearborn St. to Butler St.
On 22nd Street, State St.	to Cottage Grove Ave.
On 31st Street, Pilvey Ave.	to Lake Park Ave.
On 35th Street, Cottage Grove Ave.	to Stanton Ave.
On 38 Street, Archer Ave.	to Kedzie.
On 39th Street, State St. Wentworth Ave.	to Wentworth Ave. to Halsted St.
On Van Buren Street, State St.	to S. W. Plank Rd. (Ogden Ave.).
On Vincennes Avenue, State St. 69th St.	to 69th St. to 79th St.
On Wabash Ave. Madison St.	to Lake St.
On Wallace Street, 26th St.	to 31st St.
On Wentworth Avenue, 39th St.	to 63rd St.

Franchises Expiring Later Part of 1906.

- On Cottage Grove Avenue,
39th St. to 67th St. (Nov. 8.)
- On 55th St.
Cottage Grove Ave. to Lake Ave. (Nov. 8.)

Franchises Expiring in 1907.

- 55th St. Loop.
- On 43rd Street,
I. C. R. R. to State St.
- On Jefferson Avenue,
55th St. to Private right of way between
56th and 57th Sts.
- On Lake Avenue,
From private right of way
between 56th and 57th to 55th St.
- On 61st Street,
Cottage Grove Ave. to 1000 rds. E. of E. line of So.
Park Ave.
- On 63rd Street,
I. C. R. R. to Cottage Grove Ave.
- On State Street,
63rd St. to Vincennes Road.
- On 22nd Street,
State St. to River.
- On 26th Street,
Halstead St. to Cottage Grove Ave.
- On 35th Street,
State St. to Centre Ave.

Franchises Expiring in 1909.

- On Cottage Grove Avenue,
67th St. to L. S. & M. S. R. R.
68th St. to 71st St.
- On Keefe Avenue,
Anthony Ave. to South Chicago Ave.
- On Rhodes Avenue,
South Chicago Ave. to 68th St.
- On 68th Street,
Vincennes Ave. to Cottage Grove Ave.
- On 69th Street,
Vincennes Ave. to Anthony Ave.
- On South Chicago Avenue,
Cottage Grove Ave. to I. C. R. R.

Franchises Expiring in 1912.

On 47th Street, State St. Ashland Ave.	to Cottage Grove Ave. to Southwest Boul.
On Grace Avenue, 62nd St.	to 63rd.
On Madison Avenue, 64th St.	to 63rd.
On 61st Street, Cottage Grove Ave.	to Madison Ave.
On 62nd Street, Stony Island Ave.	to Grace Ave.
On 63rd Street, I. C. R. R . 63rd St. Loop.	to Stony Island Ave.
On 64th Street, Stony Island Ave.	to Madison Ave.
On Stony Island Avenue, 63rd St. 63rd St.	to 62nd St. to 64th St.
On 35th Street, State St. California Ave.	to Rhodes Ave. to Centre Ave.

Franchises Expiring in 1913.

On 63rd Street, Ashland Ave. Central Pk. Ave.	to Central Pk. Ave. to Hyman Ave.
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Franchises Expiring in 1914.

On Centre Avenue, 47th St. 63rd St.	to 63rd St. to 75th St.
On Halsted Street, 69th St.	to 79th St.
On 63rd Street, Cottage Grove Ave. Cottage Grove Ave.	to State St. to C. R. I. & P. R. R.
On Wallace Street, 39th St.	to Root St.

Franchises Expiring in 1915.

On Archer Avenue,	
39th St.	to 51st St.
51st St.	to So. 48th Ave.
On 47th Street,	
I. C. R. R.	to Cottage Grove Ave.
(Tracks of Co., presumably S. W. Boul.)	to Archer Ave.
On 59th Street,	
State Street,	to Western Ave.
On Kedzie Ave.	
38th St.	to 63rd St.
On Morgan (formerly Laurel Street),	
31st St.	to 39th St.
On 69th Street,	
Leavitt St.	to Western Ave.
On 29th Street,	
Butler St.	to Wallace St.
On 38th Street,	
Archer Avenue,	to Central Pk. Ave.
On Throop Street,	
31st St.	to Archer Ave.
On Western Avenue,	
Archer Ave.	to 71st St.

Franchises Expiring in 1916.

On 57th Street,	
State St.	to Western Ave.
On Wentworth Avenue,	
22nd St.	to Archer Avenue.
39th St.	to 22nd St.

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FACTORY LEGISLATION

OF

RHODE ISLAND

by

JOHN KER TOWLES, Ph.D.

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PREFACE.

This paper deals with such labor legislation of Rhode Island as applies particularly to factories. The selection of laws for discussion has been to some extent a matter of personal judgment and may appear somewhat arbitrary. The aim has been to give chief attention to laws which are under the jurisdiction of the state factory inspectors. The analytical table of contents is arranged for those wishing a brief summary of the conclusions reached.

I wish to make grateful acknowledgment to the Carnegie Institution of Washington for financial aid given me while collecting material for this study. I desire to express particular obligation to Professors Clive Day and Henry W. Farnam for advice and criticism. It is a pleasure to acknowledge my indebtedness to Mr. Clarence S. Brigham, Librarian of the Rhode Island Historical Society, for various courtesies; to Professor Morton A. Aldrich, of Tulane University, for advice as to the treatment of the present administration of child labor laws; to Professor Alba M. Edwards, of Bowdoin College, for suggestions in planning this study; to Professor Henry B. Gardner, of Brown University, for introducing me to state officials of Rhode Island; and to many others whose kindness has facilitated the preparation of this paper.

New Haven, Conn.,

JOHN K. TOWLES.

May 1, 1908.

CHAPTER I.

INTRODUCTION: A SKETCH OF THE FACTORY SYSTEM IN RHODE ISLAND.

Factory legislation has been developed to guard the physical and moral health of laborers employed in manufacturing establishments. Such legislation is a concomitant of the factory system. It may be well, therefore, by way of introduction to sketch briefly the growth of manufactures in Rhode Island.¹

The State has long been a leader in manufacturing enterprises: in colonial days it excelled in such forms of manufacturing as then existed in America; at Pawtucket in 1790 the first cotton mill in America was established; and at the present time Rhode Island is the most purely industrial of all the States and has the greatest density of population, 407 inhabitants to the square mile. By the census of 1900, the State led all others in the value per capita of its manufactured goods. The proportion of wage earners employed in manufactures in 1900 averaged 23.1 per cent. of the total population, or 98,813 out of a population of 428,556. The greatest number employed at any one time during the year was no less than 27.1 per cent.

¹The brief summary here given of the factory system in Rhode Island is based on Bowditch: *Industrial Development of Rhode Island* (Field: *State of Rhode Island and Providence Plantations*, Vol. III, pp. 323-386); Jones: *Transitions of Providence from a Commercial to a Manufacturing Community*; Bishop: *History of American Manufactures*; *Twelfth Census of the United States*, Vol. VIII, Part II.

The manufacture of textiles is the leading industry of the state. As has been mentioned, Samuel Slater in copartnership with Moses Brown established at Pawtucket in December, 1790, the first cotton spinning mill in America. Though several other mills were soon afterward put into operation, it cannot be said that cotton manufacture was an immediate success. Owing to the lack of capital, to high wages, high interest rates, poor machinery, and, above all, to a lack of skilled labor, very little progress had been made by 1806. After that date conditions improved, but, as Jones gives abundant evidence, manufactures cannot be considered as firmly established in Rhode Island until 1824. The power loom for cotton cloth was not introduced until 1817 and for many years after that date the mills were chiefly occupied in supplying yarn to be used on hand looms in the homes of workers. Between 1824 and 1840, commerce and agriculture steadily declined in importance and Rhode Island became essentially a manufacturing state. In 1832, according to statistics compiled under the auspices of the National Tariff Convention, there were 116 cotton mills in the state giving employment to 8,500 persons. In 1860, the mills numbered 135 and employed 12,089 workers. In 1900, there were 87 mills with a working force of 24,032 persons.

Rhode Island is also a center for the manufacture of woollens and worsteds. The first use of power machinery in woolen manufacture was at Peacedale, South Kingston, by Rowland Hazard in 1804. In 1832, the nineteen mills of the state employed 383 persons. The census of 1860 showed 57 mills employing 4,229 hands. The majority of the large mills have been established since 1860. The returns for 1900 give 77 woolen and worsted mills employing 17,606 persons. This does not include

15 hosiery and knit good factories with 1,594 employees.

Ranking next in importance to its textile establishments are the iron mills and machine shops of the state. Rhode Island in early colonial days became noted for its machine shops and foundries and has maintained a leading position in these industries. Throughout the Revolution the state supplied a large portion of the cannon and small arms used by the American armies. The machinery for the early cotton mills was made in the state. In 1900 the iron works numbered 144 and employed an average number of 8,800 persons. Rhode Island ranks first among the states in the manufacture of jewelry. In 1805 there were four firms in Providence giving employment to 30 hands. In 1825, the number of establishments had increased to eleven, but none employed over twenty hands. The establishments numbered 86 in 1860. By the census of 1900 there were in Providence 207 jewelry establishments, giving work to 6,977 persons.

For those who are statistically inclined the following summary of manufactures in the state is adjoined:

COMPARATIVE SUMMARY, 1850 TO 1900, OF RHODE ISLAND MANUFACTURES.

	Date of Census					Per Cent. of Increase				
	1900	1890	1880	1870	1860	1850	1860 to 1870	1870 to 1880	1880 to 1890	1890 to 1900
Number of establishments.....	4,189	3,377	2,205	1,850	1,191	864	24.0	53.2	19.2	55.3
Capital.....	\$183,784,587	\$126,483,401	\$75,575,943	\$66,557,322	\$24,278,295	\$12,935,676	45.3	67.4	13.6	174.1
Salaries of officials, clerks, etc., number.....	4,433	4,865	.....	.....	.....	.....	.....	.....	.....	.....
Salaries.....	\$5,552,189	\$4,688,608	.....	.....	.....	.....	.....	.....	.....	.....
Wage-earners, average number.....	98,813	81,111	62,878	49,417	32,490	20,967	21.8	29.0	27.2	52.1
Total wages.....	\$41,114,084	\$33,239,313	\$21,355,619	\$19,354,256	\$8,760,125	\$5,047,080	23.7	55.6	10.3	120.9
Men, 10 years and over.....	64,508	49,684	37,060	28,804	20,795	12,923	29.8	34.1	28.7	38.5
Wages.....	\$31,295,442	\$24,915,189	.....	.....	.....	.....	.....	.....	.....	.....
Women, 16 years and over..	29,269	25,602	18,270	14,752	11,695	8,044	14.3	40.1	23.8	26.1
Wages.....	\$8,909,010	\$7,397,979	.....	.....	.....	.....	.....	.....	.....	.....
Children, under 16 years....	5,036	5,825	7,548	5,861	.....	.....	.....	.....	.....	.....
Wages.....	\$909,632	\$926,145	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous expenses.....	\$12,199,283	\$8,825,407	.....	.....	.....	.....	.....	.....	.....	.....
Cost of materials used.....	\$96,392,661	\$76,253,023	\$58,103,443	\$73,154,109	\$19,858,515	\$13,186,703	26.4	31.2	20.6	268.4
Value of products, including custom work and repairing	\$184,074,378	\$142,500,625	\$104,163,621	\$111,418,354	\$40,711,296	\$22,117,688	29.2	36.8	36.5	173.7
Total population.....	428,556	345,506	276,531	217,353	174,620	147,545	24.0	24.9	27.2	24.5
Wage-earners engaged in man- ufactures.....	98,813	81,111	62,878	49,417	32,490	20,967	21.8	29.0	27.2	52.1
Per cent. of total population	23.1	23.5	22.7	22.7	18.6	14.2	.....	.....	.....	.....
Assessed value of real estate..	\$320,318,384	\$243,081,296	\$188,224,459	\$132,867,581	\$83,778,204	\$54,358,231	31.8	29.1	41.7	58.6
Value of land and buildings in- vested in manufactures.....	\$44,180,729	\$28,274,887	.....	.....	.....	.....	.....	.....	.....	.....
Per cent. of assessed value..	13.8	11.6	.....	.....	.....	.....	.....	.....	.....	.....

* Includes proprietors and firm members, with their salaries; number only reported in 1900.

* Not reported separately.

* Decrease.

* Not reported.

* As given in Rhode Island Manual for 1900, page 288.

* Does not include value of rented property.

Note.—The manufacturing establishments as given include hand trades and factories with a product of less than \$500.—
Twelfth Census of United States, Vol. VIII, Part II, p. 808.

CHAPTER II.

CHILD LABOR.

I. *Conditions and Attempted Legislation before 1840.*

The principle of common law that all persons under twenty-one years of age have a claim to special protection from the state was inherited by the American States from England. This principle was early shown in the English laws dealing with inheritance and contracts, and by the special provisions guarding the rights of minor apprentices. These apprentice laws were practically copied by the American colonial assemblies and later were incorporated as part of the statutes of the states.

It is natural, therefore, that in Rhode Island, as in most of the states, the law designed to correct the evils of child labor should have been the first phase of labor legislation to attract public attention and support. The laws relating to the work of children have been most often before the General Assembly, and the public attitude to such measures is still a fair index of its opinion of all legal restrictions upon labor contracts.

During the 18th century children had long been employed under the domestic system of manufacture and the severity of the work and hours was perhaps equal to that under the early factory system, but as the little laborers were not concentrated in large numbers so as to strike the public conscience, no serious attempt was made to remedy these conditions. Parents would have regarded as an infringement upon a fundamental right any measure preventing them from employing their chil-

dren in their own homes in any manner they saw fit. It was only after the workers had been gathered together in the mills, that agitation for remedial legislation became practical. The many abuses and failings of the factory system were recognized at an early date; but, on the other hand, its beneficial aspects have not received adequate attention. The critics of the system do not seem fully to realize that, by bringing large numbers of workers into close association, by the greater strategic power given labor unions, and the increased opportunity afforded for selecting efficient union leaders, the factory has been one great force in the modern labor movement. Before men could act in concert, it was necessary that they be assembled in large groups and made to realize their common interests and opportunities.

There was no definite objection made against child labor before 1828 for the very good reason that not until a few years previous to that date could the factory system be said to be established in Rhode Island. In 1824, the chief interests of New England were still ship-building, commerce, and the fisheries. Webster, in his opposition to the tariff of this year, was a typical advocate of these older interests, which were gradually giving place to those of a new industrial regime. Dr. William Jones, in his careful study of the changes in Rhode Island industry, gives the period 1806-1824 as one of transition from commercial to industrial interests, and states that not until the end of this period could manufactures be said to have become predominant.¹ It was not until 1817 that the power loom came into use, and long after that date the factories were chiefly occupied in the making of yarn to be woven in the homes of the workers. During

¹ Jones: *The Transition of Providence from a Commercial to a Manufacturing Community*, p. 10.

the first third of the century, therefore, the extent of manufactures was not such as to make the question of child labor one of vital importance to the public.

Early Attitude of Public Toward Child Labor.—The attitude of the public to the labor of women and children during these early days of the factory system was very different from that of our own day, and this must be borne in mind in considering what might otherwise appear cruel and callous on the part of the employer. It was then thought most beneficial that women and children should work, and the cotton mill was welcomed as giving employment to a part of the population which would otherwise have been comparatively idle. When Slater set hundreds of children to work in his factory he was convinced that such was a most beneficent and public-spirited act. It was in the "mores" of the time for children to be made to work; therefore, for such a society, child labor was right. Miss Edith Abbott has shown it is a mistake to think that only within recent years have women and children taken a prominent part in industrial production. On the contrary, they formed almost the entire labor force of the early factories.² This attitude toward child labor was an inheritance from the previous century when, with the limited subsistence yielded by hand production, it was perhaps necessary for the child to be self-supporting. With our modern machine production the surplus is so large that there is little danger of the great mass of the workers falling to the subsistence level; hence, child labor is not needed and is, therefore, tabooed by the best public opinion.

As an instance of the early attitude towards work by children, it may be noted that the Boston "Society for Encouraging Industry and Employing the Poor" was or-

² *Journal Pol. Econ.*, Vol. XIV (Oct., 1906).

ganized in 1751 to "employ our own women and children who are now in a great measure idle."³ In 1770, a memorial presented to the General Court of Massachusetts stated that because of the increasing number and expense of the poor, rooms had been engaged and spinning wheels set up "for employing young females from eight years old and upward in earning their own support."⁴ Hamilton was in agreement with the spirit of the time when in the course of his "Report on Manufactures" in 1791, he said:

"It is worthy of particular remark that, in general, women and children are rendered more useful, and the latter more early useful, by manufacturing establishments than they would otherwise be. Of the number of persons employed in cotton manufactories in Great Britain, it is computed that four-sevenths, nearly, are women and children; of whom the greatest portion are children, and many of them of a tender age."⁵

Slater says in a letter of 1827: "The wool business requires more man labor and this we study to avoid."⁶ The manufacturers were successful in this study to avoid employing men, but were very sensitive to criticism directed against such a policy. The "Rhode Island American" in replying to Thomas Campbell's "Lines on Re-visiting a Scottish River" had this to say:⁷

"It is, to be sure, very poetic to talk about 'chaining childhood to Ixion's wheel,' but plain sense tells us honest

³ Bagnall: *Textile Industries of U. S.*, p. 33. (Cited by Miss Abbott, p. 491).

⁴ Cited by Edith Abbott, *Jour. Pol. Econ.*, XIV, p. 492.

⁵ Hamilton's Works, Vol. III, p. 207.

⁶ White: *Life of Slater*, p. 131.

⁷ The lines especially referred to were:

"Yon pale mechanic, bending o'er his loom,
And Childhood's self, as at Ixion's Wheel
From morn to midnight tasked to earn its little meal."

labor is much better than the most romantic indolence, even for 'children,' which had better be taught to *earn* than to *beg* its little meal. Doubtless in many of the British manufactories children are overtasked, and weavers become sickly by excess of labor; but even this evil is vastly less than the misery attending an overflowing and unemployed population. * * * They [the children] are better employed in being 'fashed' even with too much labor, than suffered to grow up in ignorance of any occupation, and pine in sloth, rags and wretchedness."⁸

Early Conditions of Child Labor.—What were the conditions as regards child labor which prompted the early attempts at legislation? Though manufacturing had not yet become the dominant interest in Rhode Island, there is evidence that children formed a large part of the labor force of such establishments as existed in the early days of the factory system. In the first cotton mill of America, Samuel Slater began work in December, 1790, with four spinners and carders. This force was soon increased by the addition of five children from seven to twelve years of age.⁹

This plan of employing young children seems to have been continued, for Josiah Quincy, who made a journey through southeast New England in 1801, gives us this glimpse of the Slater mill:

"All the processes of turning cotton from its rough into every variety of marketable thread state, such as cleaning, carding, spinning, winding, etc., are here performed by machinery operated by Water-wheels, assisted only by children from four to ten years old, and one

⁸ Rhode Island American, Mar. 21, 1828.

⁹ Field: State of Rhode Island and Providence Plantations, Vol. III, p. 343.

superintendent. Above an hundred of the former are employed at the rate of from 12 to 25 cents for a day's labor. Our attendant was very eloquent on the usefulness of this manufacture, and the employment it supplied for so many poor children. But an eloquence was exerted on the other side of the question more commanding than his, which called us to pity these little creatures, plying in a contracted room, among flyers and coggs, at an age when nature requires for them air, space, and sports. There was dull dejection in the countenances of all of them. This united with the deafening roar of the falls and the rattling of the machinery put us in a disposition easily to satisfy our curiosity."¹⁰

With the extension of cotton and woollen manufacture, the number of minors employed increased. This attracted attention but did not persuade the public to action. Though there were cases of individual indignation, the public was passive and its interests perfunctory. In 1824, Mr. Burgess stated in the General Assembly that there were "2,500 children, excluding weavers, from the age of seven to fourteen years employed in the manufactures of the state."¹¹ Throughout this period there were advertisements appearing in the papers of which the following is a fair example: "Ten or twelve good respectable families consisting of 4 to 5 children each, from 9 to sixteen years of age, are wanted to work in a cotton mill in the vicinity of Providence. * * * Apply to William Sprague, Jr. at Natick Village."¹² These notices became numerous at this date and show that the demand for child labor was increasing. In a letter to the "National Intelligencer" John Whipple of Rhode Island said,

¹⁰ Account of Journey of Josiah Quincy, 1801. Proceedings Massachusetts Historical Society, 2nd series, Vol. IV, p. 124.

¹¹ Mfg. & Farm. Jour., Jan. 26, 1824. (Cited by Jones.)

¹² Mfg. & Farm. Jour., Jan. 17, 1828.

in speaking of the advantages of machine production,—“A thousand spindles require on the average, 41 persons within the factory. All the machinery in the country requires but 39,031 persons, principally women and children.”¹³ For the year 1830 it was estimated that about two-fifths of the persons employed in factories were between the ages of seven and sixteen years.¹⁴

The following statistics given by Pitkin, for cotton manufacture in 1831, are of special value:¹⁵

	N. Hamp.	Mass.	Conn.	Rhode I.
Capital	\$5,300,000	\$12,891,000	\$2,825,000	\$6,262,340
No. Mills	40	250	94	116
No. Spindles	113,776	339,777	115,528	235,753
No. Looms	3,530	8,981	2,609	5,773
Yds. of Cloth.....	29,060,500	79,231,000	20,055,500	37,121,681
Males Employed	875	2,665	1,399	1,731
Wages per Week.....	\$6.25	\$7.00	\$4.50	\$5.25
Females Employed ...	4,090	10,678	2,477	3,297
Wages per Week.....	\$2.60	\$2.25	\$2.20	\$2.20
Children under 12 yrs.	60	.....	439	3,472
Wages per Week.....	\$2.00	.....	\$1.50	\$1.50

It is seen that according to this estimate there were in 1831 in Rhode Island 3,472 children under twelve years of age, as compared to 60 in New Hampshire and 439 in Connecticut. Even if it is granted that the number for Rhode Island was over-estimated it still appears that the state was especially given to the employment of child workers.

Factory Sunday Schools.—The early attempts to educate the factory children took the form of Sunday schools in which the little workers were instructed in elementary, secular subjects. The first of such schools was established by Samuel Slater in connection with his factory, in 1796,

¹³ Providence Patriot, Mar. 29, 1828.

¹⁴ Grieve: History of Pawtucket, p. 98.

¹⁵ Pitkin's Statistics of the U. S., p. 526.

similar schools having been in operation at the mills of Strut and Arkwright when Slater left England.¹⁶ These schools became more numerous with the extension of cotton manufacture. From Pawtucket, they were introduced into Providence in 1815.¹⁷ Dicey thinks that the factory Sunday school was introduced in England because the manufacturers knew that public indignation would be aroused if the children received absolutely no instruction.¹⁸ Southey complained that the mill owners had "converted Sunday into a schoolday." The question arises: did a similar motive actuate the manufacturers of Rhode Island? There is no proof for such an allegation, and we may as well give the mill owners the benefit of the doubt. These schools were subsequently taken under the patronage of the different religious societies and made to serve the purpose of religious instruction.¹⁹ The Rhode Island American, after giving a list of the Sunday schools in 1828, remarks: "Every factory in the State ought to have its Sunday school. There is no better means of refuting the argument to often urged against manufactures that they tend to demoralize and debase the rising generation."²⁰

Factory Children and the Beginning of Public Education.—Though the public school law of 1800 was passed chiefly through the influence of the Providence Association of Mechanics and Manufacturers,²¹ Jones is of the opinion that the act was "in no wise intended to give to

¹⁶ Mfg. & Farm. Jour., Aug. 13, 1835; Staples: Annals of Prov., p. 532.

¹⁷ White: Memoir of Slater, p. 108.

¹⁸ Dicey: Law and Opinion in England, p. 222.

¹⁹ Mfg. & Farm. Jour., Aug. 13, 1835; White: Memoir of Slater, p. 108.

²⁰ R. I. Amer., April 18, 1828.

²¹ See petition to Gen. Assem., Feb., 1799.

the factory children the benefit of school instruction."²² There is reason to believe that the measure was not demanded by the laboring classes. John Howard, who was foremost in securing the passage of the act says, "It is a curious fact that throughout the whole work it was most unpopular with the common people and met with most opposition from the class it was designed to benefit."²³ This first attempt to establish free schools was "virtually defeated by simple non-enforcement"²⁴ and the act was formally repealed at the February session 1803. During the subsequent twenty-five years all attempts to reëstablish a system of public schools were unsuccessful.

The tardy adoption and late development of the idea of public education was probably due to the earnest desire of the people to keep the Church and State separate and prevent any religious denomination from gaining predominance by sectarian teaching in the State schools. Dr. Tolman is of the opinion that the desire to maintain religious freedom was one of the chief reasons for the slow growth of a system of education,²⁵ and this argument is given more complete statement by Richman.²⁶ This insistence upon complete religious toleration combined with a high spirit of individualism which opposed any suggestion of state paternalism thus retarded the establishment of free schools and indirectly made the evils of child labor more acute.

In 1818, Governor Knight in a message to the General Assembly called attention to the need of providing public

²² Jones: *Transition of Providence from a Comm. to a Mfg. Community*, p. 26.

²³ Stone: *Life and Recollections of John Howard*, p. 138.

²⁴ Stockwell: *History Pub. Educa. in Rhode Island*, p. 21.

²⁵ W. H. Tolman: "History of Higher Education in Rhode Island," p. 25.

²⁶ Richman: *History of Rhode Island*.

education for the factory children. He emphasized the fact that a large number of children were growing up in ignorance and that this was a special danger to a democratic government.²⁷ In 1820, the Governor submitted a plan for the establishment of a system of public schools, which was in many respects similar to that finally adopted in 1828.²⁸

About this time several evening schools were established by the different mills. The first of these factory evening schools is said to have been established in 1821 by Rowland G. Hazard at Peacedale.²⁹

The first definite proposal for a child labor law seems to have been made by Mr. Burgess, when at the January session, 1824, he reported a resolution providing by law for the education of factory children. It was planned to have the employers bear the expense of these schools. "The proposal met with little favor. Instead of being a source of complaint, the employment of 2,500 children in factories seemed to some to be a source of consolation."³⁰

The second movement for a State system of public schools began in 1820 and gained increasing support until the passage of the law of January 1828. There is no reason for the opinion that this act was intended primarily for the education of working children. Public opinion at that date would not have supported the idea of taking the children of the poor from the mills in order that they might attend the schools. Also, under the early school laws part of the school fund was obtained by assessment upon the parents of the scholars, and

²⁷ Schedules of General Assembly, 1818.

²⁸ *Ibid.*, 1820.

²⁹ Necrological Sketch of R. C. Hazard, Providence Journal.

³⁰ Jones: Transition of Providence from a Comm. to a Mfg. Community, p. 72.

though the poor were allowed to exempt themselves from this assessment by taking an oath as to their poverty, few availed themselves of this privilege. This assessment, therefore, had the effect of practically excluding the children of the very poor from the schools.

Though there is no reason to suppose the public school system was established to meet the needs of factory children, the education of these children evidently was receiving increased attention in 1828. "The Rhode Island American" was "most anxious to take from the enemies of Domestic Industry almost the only plausible objection they can urge: the tendency of employment in manufacturing establishments to deprive children of the means of education."³¹ The following editorial expression, which is unusual for so early a date, is found in the *Manufacturers and Farmers' Journal* of the same year:³² "Not only the means of obtaining the rudiments of a good education should be given to all, but all should by law be compelled to receive them. Parents should not have the exclusive control over their children, but, as in Athens, should be considered Public property, . . . "

There is some evidence that this increased attention to education resulted in an attempt to provide especially for the schooling of factory children, but it is an error to state that the matter was placed before the Legislature. The *Providence Phoenix* of Feb. 9, 1828, had an editorial paragraph saying: "A bill is before the Legislature which prohibits any manufacturer from employing in his establishment any person between the age of twelve and eighteen years who cannot read and write, unless the manufacturer shall give a written obligation to provide for the

³¹ *R. I. Amer.*, May 2, 1828.

³² *Mfg. and Farm. Jour.*, Jan. 14, 1828.

instruction of such minors as he shall employ." There is no record that such an act was actually introduced; no mention is made of it in the original records in the State archives nor in the newspaper reports of the legislative proceedings. It is probable that such a measure was discussed at this date, but that it did not come before the General Assembly. It will be noted that such a law would have been highly restrictive; even at the present time, it would not be possible to decree that all employees between the ages of twelve and eighteen should be able to read and write. What must be borne in mind here is that such agitation as existed and such laws as were proposed did not represent the attitude of the public which, in the main, seemed indifferent to the entire matter. Such continued to be the public attitude for many succeeding years, and a decided trace of this indifference still lingers at the present day.

II. *Legislation from 1840 to 1883.*

The Law of 1840.—During the ten years following 1828, the number of children in the factories increased and it was found that the public school system did not reach the great mass of the poorer children. During the early '30's there was a rapid growth of trade unions which demanded better working conditions, especially shorter hours of labor, in order that working children might have some advantages of education.⁸⁸ Though this union labor movement seems to have disappeared about 1835, it is probable that the ideas then emphasized had some influence upon later developments. Seth Luther, perhaps the most prominent of Rhode Island labor leaders, said in an address to the workingmen of New England,

⁸⁸ This movement is given more complete notice under "Hours of Labor."

1833: "A committee of workingmen in Providence report 'that in Pawtucket there are at least 500 children who scarcely know what a school is.' . . . This may serve as a tolerable example of every manufacturing village of Rhode Island."⁸⁴

Nor, does the public school system of Woonsocket seem to have given the best results, for its historian writing of the period about 1836 says: "The inhabitants were but a step above barbarism. Many of the school committee were rude in manner and speech and many of the pupils were so vulgar, uncouth and savage, that one of the chief requisites of a successful teacher was a good muscular development."⁸⁵ In 1836, there were in the city of Providence 3,235 children between the ages of five and fifteen years who did not attend any school.⁸⁶ When the total population of Providence of that day is considered, this number of absentees seems unusually large. A few years previous to 1839, the *school books* of Massachusetts stated that "in Rhode Island there were more people unable to read and write than in any other State in the Union."⁸⁷ It may be added here that the historians of Massachusetts have never been partial to Rhode Island and the same is probably true of her text book writers. Probably the educational conditions of Rhode Island were not much below those of her neighbors.

To these factors directing attention to the education of factory children must be added the influence of reforms in England. A crucial event in the factory reform movement of England was the publication, in 1830, of

⁸⁴ Luther: "Address to the Working Men of New England," p. 21.

⁸⁵ E. Richardson: *History of Woonsocket*, pp. 93-94.

⁸⁶ Stockwell: *History Public Education in Rhode Island*, p. 179.

⁸⁷ *Providence Journal*, June 8, 1839, p. 2, col. 1.

Richard Oastler's letters on conditions in Yorkshire. The American papers from time to time gave accounts of subsequent reforms. For instance, the "Providence Journal" of May 14, 1833, prints a bill, then before Parliament, regulating the hours of labor, sanitation, and the guarding of machinery. A growing recognition of the needs of the children is perhaps shown by the founding of the "Children's Friends Society of Rhode Island," in November, 1836.⁸⁸

Such were some of the influences which led to the introduction by Mr. Thomas R. Holden of Warwick, on Nov. 3, 1838, of an act providing that no child under twelve years of age should be employed in any manufacturing establishment, unless such child should have attended school at least three months of the twelve next preceding employment.⁸⁹

The bill came before the Assembly several times during 1839,⁴⁰ but its opponents were successful in postponing a final vote until the January session of 1840. During the course of these several debates it was argued that such a law would inflict great hardship upon the children of the poor; that it was not to the interest of the manufacturers to employ minors, but this was done to relieve the necessities of parents. Also, the provision for school attendance would not be practicable since it was difficult to obtain appropriations for school money to be spent in manufacturing villages. It was further urged that the act discriminated against manufacturers; the restrictions should be made to apply to all employers of children. It is thus seen that the chief objections advanced against

⁸⁸ Providence Journal, Nov. 5, 1836.

⁸⁹ Journal of House of Representatives, Nov. 3, 1838; Providence Journal, Nov. 5, 1838.

⁴⁰ Journal of House, Feb. 2, 1839; Providence Journal, Oct. 30, 1839.

child labor legislation during recent years were prominent in the earliest debates on the subject.⁴¹

The advocates of the measure emphasized the distressing conditions of ignorance among the factory children, and the urgent need of laws to protect these little workers from the cupidity of their parents. Mr. Holden and Mr. T. T. Hazard, the chief champions of the measure, pointed out that Pennsylvania prohibited the employment of children under ten years of age, and that a law similar to the act under consideration, had given good results in Massachusetts. The bill "had met with the constant opposition of the manufacturers," but no one had given a good reason why it should be rejected. The House refused to postpone again the vote, and, January 25, 1840, the bill passed both branches of the Assembly.⁴²

The act as passed required children under twelve, employed in manufacturing establishments, to attend school at least three months of the twelve next preceding employment. For each violation of this act the employer was to be fined \$50. A certificate signed and sworn to by the instructor would be deemed sufficient evidence that a child had attended school as required.⁴³

Enforcement of the 1840 Law.—No one was made directly responsible for the enforcement of this law which was consequently respectfully disregarded by the manufacturers. It may be included in that class of early labor laws styled by Miss Whittelsey as "unenforcible threats."⁴⁴ The enactment was, however, a *public recognition* of the evils of child labor and as such was a step forward. Strange as it may at first appear, the law did

⁴¹ Providence Journal, Feb. 4, 1839; Manf. & Farm. Journal, Jan. 27, 1840.

⁴² *Ibid.*

⁴³ Public Laws, 1822-40, p. 2002.

⁴⁴ Annals American Acad. Pol. and Soc. Science, XX, 238.

not meet with the hearty approval of the school authorities. The truth is, the law was in advance of the educational facilities of the time; there were not then sufficient schools for the unemployed children, not to mention the children in the mills. Mr. Harris of Warwick, during the debate on an act proposed in 1850, said that the 1840 law "had been repealed at the suggestion of the School Commissioner, Mr. Barnard," and Mr. Cranston, upon the same occasion, remarked of the act that "so far as he recollected its results, they were unfavorable and prejudiced rather than favored the cause of education."⁴⁵ Mr. Harris was mistaken in thinking the law had been directly repealed. At the January session, 1844, an act was passed repealing all laws not contained in the revised statutes of that year, *with the exception* of the laws relating to public schools, which laws were continued in force until July, 1845. The law of 1840 was, therefore, repealed by being omitted from the general school law, drafted by Mr. Barnard, and which went into effect, as provided, in 1845.

Causes for the Laws of 1853 and 1854.—By the indirect repeal in 1845 of the 1840 law, Rhode Island was left without any legislation affecting child labor, and for the next decade the opposing interests successfully resisted all proposals for such a measure. During this period, the conditions regarding the number of factory children, their opportunities for education, and their hours of work reached such a stage as to cause the Legislature, in 1851, to order an investigation. The facts brought out by this inquiry were chiefly responsible for the laws of 1853 and 1854.

Mr. Barnard, Commissioner of Public Schools, reported that in 1845 the number of children over four and under sixteen years, was 30,000. Of these, about 18,000 were

⁴⁵ Providence Journal, Feb. 1, 1850.

enrolled and the average attendance was but 13,500.⁴⁶ In ninety-six school districts the average term was thirteen weeks; in one hundred and sixty-six districts nine weeks.⁴⁷ For the year 1850 the average attendance was calculated to be 16,590, and the commissioner says, "It is seen that there are a large number who do not participate in our public schools and who are left to grow up in ignorance."⁴⁸ The census for this year shows 3,607 persons in Rhode Island over twenty years of age who could not read or write; of these 1,248 were of native birth. The public school commissioners during this period severely arraign the mill owners and the parents of factory children for encouraging such conditions.⁴⁹

At the June session 1851, the Legislature authorized the Governor to appoint a commissioner to inquire into the conditions of child labor. The commissioner, Colonel Welcome Sayles, made a careful study of the situation and at the January session, 1853, submitted these statistics of child labor:

CHILDREN IN MANUFACTURING ESTABLISHMENTS.

Under nine years.....	59
Over nine and under twelve years.....	621
Over twelve and under fifteen years.....	1,177
<hr/>	
Total under fifteen years.....	1,857

⁴⁶ Report of Commissioner of Public Schools, 1845, p. 35.

⁴⁷ Report of Commissioner of Public Schools, 1845, pp. 38, 39.

⁴⁸ Report, 1850, p. 2.

⁴⁹ The evil "lies deep down in the cupidity and negligence of parents, and the change which has been wrought in the habits of society by the substitution of the cheaper labor of children and females, for the more expensive labor of able-bodied men."—Barnard's Report, 1845, p. 37.

"Many who have health and strength, . . . yield to this temptation and live upon the labor of their children."—Report of Commissioner of Public Schools, 1852, p. 28.

"Besides, there are a large number of our own people native and foreign born, who have never been at school at all."—*Ibid.*, 1851, p. 4.

The commissioner was pleased with the favorable statistics regarding the employment of children under nine years of age. He said this was due "to the improvement of machinery which renders the employment of young children far less desirable." He remarks that in the employment of young children there had been a great improvement during the previous four years.⁵⁰ Yet in the same report, an instance is given of a child fourteen years of age, who had been employed since the age of seven, and the statement made that this was by no means a rare indication of the conditions prevailing in the mills.⁵¹ The lack of educational opportunities is expressed in these terms: "It must be admitted that the great body of the operatives in the manufacturing establishments of our State, are without any adequate advantages for the most common education. It does not in my mind improve the matter or lessen the evil, that large numbers of these operatives are the children of foreigners." This condition was "by no means always the fault of the employer;" it was "often the result of seeming indifference of parents, sometimes of what they regard as their necessities."⁵²

Those sections of the report dealing with the long hours of child labor were among the features which aroused the attention of the General Assembly.⁵³ As a remedy for these evils, Colonel Sayles recommended the passage of a law providing that:⁵⁴

1. No child under twelve be employed in any manufacturing establishment.
2. No child between the ages of twelve and fifteen be employed more than nine months of each year.

⁵⁰ Report, p. 4.

⁵¹ *Ibid.*, pp. 6, 7.

⁵² Report, p. 6.

⁵³ See Chapter on "Hours of Labor."

⁵⁴ Report, pp. 7, 8.

3. No child between the ages of twelve and fifteen be employed for more than eleven hours in any one day.

4. A State Commissioner of Mill Help be appointed to visit all factories.

5. Ten hours to be a legal day's work for all persons unless otherwise agreed between the contracting parties.

It will be noted that the recommendation for a commissioner of mill help, is a very early proposal for establishing the office of factory inspector.

The Law of 1853.—The previous attempts at child labor legislation, combined with the recommendations of Commissioner Sayles, finally focussed the attention of the Legislature.⁵⁵ It is not probable that the laboring classes were of much importance politically at this time.⁵⁶ The example of England was a large influence and was often

⁵⁵ In January, 1845, the citizens of Bristol petitioned an act securing educational advantages to factory children. (*Mfg. & Farm. Jour.*, Jan. 13, 1845.) This petition was again before the Legislature in 1847 (*Ibid.*, Oct. 28, 1847); while the following year the matter was brought up by Wm. B. Spooner and others (*Ibid.*, Feb. 7, 1848). An act for the better instruction of factory children was introduced in October, 1849 (*Providence Journal*, Nov. 2, 1849).

January, 1850, Mr. Brown, of Cumberland, presented a bill providing that all factory children under fourteen be required to attend school three months out of the year (*Providence Journal*, Jan. 31, 1850). The support for this measure developed unexpected strength, and it was only after much debate and tactics of delay, that it was defeated (*Providence Journal*, Feb. 1, 1850). At the October session, 1851, Mr. Porter introduced an act "to limit the hours of labor and to prevent the employment of children in factories" (*Mfg. & Farm. Jour.*, Oct. 30, 1851). An act relating especially to the hours of child labor was before the Assembly in February, 1852 (*Mfg. & Farm. Jour.*, Feb. 9, 1852). These latter measures were quickly disposed of by the opposition.

⁵⁶ "The landless workingman and mechanic is as eligible to any office in this State as the richest landowner. Yet, it is believed that class is not represented by a single member either in the Senate or the House of Representatives of this State." *Mfg. & Farm. Jour.*, Sept. 4, 1851.

referred to during the debates. An act embodying the Commissioner's suggestions passed the Senate practically without dissent,⁵⁷ but in the House the measure met with the most vehement opposition and it was only after the provisions regarding education had been stricken out, that the bill passed.

The advocates of the bill as passed by the Senate, were led by George H. Brown, of Gloucester, whose speech deserves to rank among the best delivered in Rhode Island, on the subject of child labor. After analyzing the provisions of the bill, and outlining the experience of England, Mr. Brown continued: "Though I believe the condition of American operatives is by no means so deplorable as that of foreign laborers, it is not to be disguised that evils of great magnitude are springing from our present system of manufacturing and mechanical labor. The most superficial observer cannot have failed to notice the pallid countenances, apparently diseased forms, and heavy steps of those children, who through the cupidity of their parents or their employers, are doomed to such unremitting and long-continued toil as is detailed in the report on your table. I am credibly informed that there are mills wherein, owing to the present active sale of their goods, the operatives work from two, three, and four o'clock in the morning until nine in the evening." These ill-formed and ill-trained children, the speaker said, would in time themselves become the parents of other children, and the effect would thus be cumulative. It was a suicidal policy for the State to allow such conditions. The parents were the chief sinners, but the employers, also, forgot "in their cupidity their duty to their less favored fellow-men and above all to their country."⁵⁸

⁵⁷ Providence Post, Feb. 3, 1853.

⁵⁸ Providence Post, March 3, 1853.

These arguments did not prevail against the practical interests of the opposition, which, under the leadership of Mr. Barstow, struck out the educational clauses and changed the hour at which children might begin work, from 6 to 5 a.m.⁵⁹ These changes were made by a strictly party vote, the Whig voting in the affirmative, the Democrats in the negative.⁶⁰ The bill as amended was then passed. The law provided that no child under twelve should be employed in any manufacturing establishment. An exception was made for children packing goods in factory warehouses. No child between twelve and fifteen years of age could be employed for more than eleven hours in any one day, and not before 5 a. m. or after 7.30 P. M. Ten hours was to be considered a legal day's work *unless otherwise agreed by the parties to the contract*. Any employer or parent who "knowingly and wilfully" violated the provisions of the act, would be liable to a fine of \$20 for each offense.⁶¹

The Law of 1854.—The exclusion of the provision for the education of factory children caused much dissatisfaction. The House had foreseen this and had passed a truancy law as a substitute for the sections stricken from the Senate child labor bill, but the Senate refused to accept this act.⁶² The Providence Post had predicted that the action of the Whigs, in regard to the 1853 bill would receive "a severe rebuke from the people at the polls in April."⁶³ Be this as it may, the Whigs were defeated, and the Democrats came into power. At the January

⁵⁹ Providence Journal, Feb. 24, 25; Providence Post, Feb. 24, 25, 1853.

⁶⁰ Providence Post, Feb. 25, 1853.

⁶¹ Public Laws, 1844-1857, p. 945.

⁶² Mfg. & Farm. Jour., Feb. 29, 1853.

⁶³ Providence Post, March 9, 1853.

session 1854, the law of 1853 was amended by adding the clause, that no minor under fifteen should be employed in any manufacturing establishment, unless he had attended school for at least three months of the year next preceding employment.⁶⁴ The penalty for violation was the same as for the 1853 law.

The Truant Law of 1856.—The idea of a truant law or any other phase of compulsory education was not kindly received by the Rhode Islanders. It is worthy of note that in 1843, Rowland G. Hazard, one of the most public-spirited citizens of the State, opposed any suggestion of compulsory education, as tending to break down personal initiative and responsibility.⁶⁵ Elisha R. Potter, while commissioner of public schools in 1851, argued that such a law would be “a deadly blow at the principles of self government.”⁶⁶ We have seen that the truant law was passed by the House in 1853, but was rejected by the Senate.⁶⁷ It was hoped that the child labor act of 1854, would improve the educational conditions,⁶⁸ but as this law did not seem to have an appreciable effect upon the school attendance, the support for a truant law became stronger and forced the passage of such an act at the May session, 1856. This law “authorized and empowered” each of the several towns of the State “to make all needful provisions and arrangements concerning habitual truants and children not attending school without any regular and lawful employment, growing up in ignorance, between the ages of six and fifteen years.” These town ordinances should

⁶⁴ Passed Feb. 24, 1854, Providence Journal, Feb. 25, 1854.

⁶⁵ Report of Commissioner of Public Schools, 1854, p. 72.

⁶⁶ *Ibid.*, p. 75.

⁶⁷ Mfg. & Farm. Jour., Feb. 29, 1853.

⁶⁸ By the State census of 1855 there were, in the City of Providence, nearly 3,000 illiterates. (Report of Commissioner of Public Schools, 1856, Report on Truancy, p. 25.)

provide for a suitable penalty not to exceed \$10, or detention of the truant in a house of reformation.⁶⁹

Administration of the 1853, 1854 and 1856 Laws.—It will be noticed that none of these three laws had any adequate provisions for administration: no one person was made responsible for their enforcement. Immediately after the law of 1853 came into effect there was dissatisfaction caused by its non-enforcement, and a resolution was passed in November of that year, appointing a committee "to ascertain whether the manufacturing establishments conform to the law regulating child labor and the hours of labor."⁷⁰ There is no record of a report by this committee. The school commissioner, in his report for the year 1856, points out that less than half the children of school age throughout the State were to be found at any given time within the schools, the attendance being but 48 $\frac{2}{3}$ per cent., while the enrollment was but 69 per cent.⁷¹ For the next year, 1857, he says: "The number of our children are annually increasing; while those of them which we are educating are actually decreasing."⁷² The school authorities were of the opinion that "hardly a capitalist or manufacturing corporation in the State wilfully violates this law [of 1854] but were often urged contrary to their better judgment and determination by the parents."⁷³ Another reason given why children were sent to the mills instead of the schools, was that the Irish immigrants were opposed to the schools, "holding that religion may possibly receive some damage from an increase of knowledge."⁷⁴ In the early '60's absenteeism is termed

⁶⁹ Public Laws of Rhode Island, 1844-57, p. 1302.

⁷⁰ Mfg. & Farm. Jour., Nov. 7, 1853.

⁷¹ Stockwell's History of Public Education in Rhode Island, p. 84.

⁷² Report of Commissioner of Public Schools, 1857, p. 13.

⁷³ Report of Commissioner of Public Schools, 1857, p. 18.

⁷⁴ *Ibid.*, p. 15.

a "chronic disease." "The absentee," said the school commissioner, "is kept from school by a cause similar to the one which operated ten years ago upon an older brother and sister. One is sent to the cotton mill, another to the woolen factory, and others assist the father on the farm."⁷⁵ Passing over the next decade, we find the commissioner, in 1872, recommending as a remedy for illiteracy, "the *enforcement* of a law which shall not allow a child to be employed in a manufacturing establishment under twelve years of age."⁷⁶ The manufacturers of Connecticut, in 1870-73, complained against the enforcement of the law of that state requiring children under fourteen to attend school three months of each year, because of the loss of labor on the eastern border of the state owing to the "perfect freedom with which parents could work their children in Rhode Island."⁷⁷

The State census of 1875 showed that there were 1,258 children under twelve employed in the mills. Of these children 599 were eleven years old; 433, ten years; 146, nine years; 64, eight years; 8, seven years; 5, six years; and 3, five years of age.⁷⁸

Mr. Barnard, in his report for 1845, was of the opinion that a manufacturing community, "from its necessary concentration in villages" must be favorably situated for a public school system, but Mr. Higginson writing in 1875, tells us that Mr. Barnard's idea "has not stood the test of time."⁷⁹ Though the compactness of a factory village was favorable, yet such a village offered greater obstacles to a full attendance than the more thinly-settled farming

⁷⁵ *Ibid.*, 1862, p. 10.

⁷⁶ *Ibid.*, 1872. Italics mine.

⁷⁷ A. M. Edwards, *Labor Legislation of Connecticut*, p. 17.

⁷⁸ Report, Commissioner of Industrial Statistics, 1887, 1, 18.

⁷⁹ Thomas W. Higginson, *History of Public School System of Rhode Island*, p. 98.

towns. In speaking of conditions in 1875, he continues: "It is well known that by the joint influence of parents and manufacturing corporations, the laws are openly violated in many of our manufacturing villages; the laws, namely, which prohibit the employment in manufacturing establishments of children under twelve, and permit no minor under fifteen to be so employed unless after attending school three months of the previous year."⁸⁰

There is reason, therefore, for the belief that these laws of 1853, 1854 and 1856 were disregarded by both parents and employers.

The Truant Law of 1871.—In connection with the non-enforcement of the laws enacted during the '50's, the very unsatisfactory conditions of education, especially those among the mill workers, have been noted. The need of public attention to this matter was emphasized by each of the annual reports of the school commissioner⁸¹ and by the messages of Governor Padelford.⁸² As a result of these efforts, the Legislature summoned up sufficient interest to pass the truant law of 1871 (Chap. 960 of 1871). This act was of little value since its general provisions are similar to those of the law of 1856 except that

⁸⁰ Higginson, *History of Public School System of Rhode Island*, pp. 98, 99.

⁸¹ The school commissioner pointed out that 10,000 children of school age were growing up in ignorance. He asked: "May not our truant laws be so modified as to have a practical binding force in securing school attendance?"—Report, 1870, pp. 54, 55.

According to the census of 1870 the illiterates of Rhode Island over ten years of age, numbered 21,901. Of this number 4,444 were of native birth—an increase of 2,892 over the native illiterates of 1860.—Report of Commissioner of Public Schools, 1872, p. 61.

⁸² There are now in our State more than 8,000 children between the ages of five and fifteen who are growing up in ignorance and without any school instruction. . . . I would, therefore, recommend a careful revision of the laws relating to truancy and absenteeism."—Governor Padelford's Message, 1870, pp. 6 and 7.

the phrasing is changed by "requiring" instead of "authorizing and empowering" the town and city councils to pass regulations regarding truancy. But there was no penalty for the non-enforcement of this "requirement," which the majority of the towns proceeded to ignore."⁸³

III. *Laws of 1883-1907.*

The law of 1883 may be taken as the beginning of a new phase of legislation, because this act is the first to provide definitely for officials for its administration. It is true, the appointment of these officers remained optional with the town and city councils, yet the means for enforcement were far in advance of the "unenforcible threats" of earlier days.

Conditions Leading to the Truant Law of 1883.—During the period from 1856 to 1883 there was practically no legislation bearing on child labor, the only exception worthy of notice being the ineffective truant law of 1871, which has been considered. During the later '50's there were indications that the idea of restricting child labor

⁸³ The number of truant children in the city of Providence was large, and, said the committee, "what is worse, is increasing." Report of Commissioner of Public Schools, 1872, Appendix, p. 8. . . . Cranston had not passed truant laws, p. 63. . . . "Left to work" was written opposite the names of the best students of Cumberland, p. 67. . . . In Woonsocket, 800 children of school age did not attend school. "No small fraction of these children are in our mills, there contrary to law," p. 142.

In 1874, Bristol complains of absenteeism. Reasons for non-attendance: 1. Child labor was profitable; 2. Laws were disregarded with impunity. Report of Commissioner of Public Schools, 1874, Appendix, p. 30.

For other complaints of absenteeism, see Report of Commissioner of Public Schools, 1874, Appendix, pp. 30-43.

"Ought not some measures be devised to stay these threatening evils, which are increasing year by year, and some system of compulsory attendance at the public schools be adopted?"—Governor Padelford's Message, 1873, p. 7.

would make rapid progress, but the great struggle between the States swept over the country, and the public mind had no attention for other matters. National affairs, especially those dealing with the currency, seem to have continued to monopolize the attention of the State Legislature long after the close of the Civil conflict. It must also be noted, that in these years the manufacturers increased in wealth and political power and were rewarded with success in their opposition to labor measures. During this period the mill help came to be composed to a large degree of foreigners and the children of foreigners, especially French Canadians. These immigrants probably were not represented in the legislative halls—aliens were not given the suffrage until 1888—and thus had small political power to support their economic claims. With the exception of those from England, our immigrants do not as a rule demand progressive labor legislation; their economic and social opportunities are so superior to those in their native countries, that they are not vigorous complainants. Again, it is possible that our legislators are not as sensitive to oppressive conditions among the immigrant laboring classes as they are to similar conditions among native workers. Such seem to be some of the probable reasons why there occurred a decided lapse in child labor legislation during the period from 1856 to 1883.

During the above mentioned period, there were manifest evils of child labor and non-attendance at public schools. The violation of the labor laws and the failure of the schools to reach the factory children, have already received some attention in this paper in connection with the administration of the laws of 1853, 1854, 1856, and 1871. These evils were not abated in subsequent years. To speak in mathematical terms, absenteeism is a function

of child labor; the statistics of the two rise and fall together; if the child of school age is not in school, he is most likely to be in the mill or shop.

The situation was summed up by Governor Lippitt in his message of 1876: "We learn that out of a population of 53,316 children of suitable school age, the average attendance is only 26,163, or more than half the children in the State are not in regular attendance at the public schools, but to a large extent are growing up in ignorance. Is it not time that education should be made so compulsory as to bring all children into our schools, for at least three months in the year?"⁸⁴ The *Semi-Weekly Journal*, March 9, 1880, stated in an editorial that one-fifth of the children of Providence did not attend any school. It also expressed the opinion that, . . . "the conflict of authority as between the State and the parents" was "one difficult of adjustment under our theory of government."

Governor Van Zandt, in 1880, speaks of "the demand and also the necessity for juvenile labor" as being one cause of the large number of absentees from school.⁸⁵ In the State Senate, 1881, Mr. Cross remarked that "as a matter of fact about one-fourth of the children of the State grow up in ignorance." Mr. Bourn of Bristol asked to which towns the speaker referred. Mr. Cross replied, "I guess it is pretty much all the towns."⁸⁶

School conditions did not improve, and in 1883 the matter was again placed before the Legislature by a Governor's message: "It is, however, a lamentable fact that the number of children in this State who are not reached by either public or private schools, is steadily increasing.

⁸⁴ Governor Lippitt's Message, 1876, pp. 9 and 10.

⁸⁵ Governor Van Zandt's Message, 1880, p. 8.

⁸⁶ Providence Journal, April 27, 1881.

From 1879 to 1882, the increase in the number of children of school age, according to our annual school census, has been 6,270, while the increase in non-attendants for the same time has been 3,277. At the present time the entire number of such non-attendants is nearly 14,000, or about 25 per cent. of the number of children of school age. Large as this number is, its chief significance lies in the fact that it is a growing evil."⁸⁷

The Law of 1883.—As a result of these conditions, several proposals were made before 1883 to change the truant law, but these failed to gain the necessary support.⁸⁸ That the act of 1883 (Chapter 363) did not meet with vigorous opposition was perhaps due to the fact that this law, in many respects, was retrogressive as compared with the then existing statutes. The act provided that all children between seven and fifteen years should attend a public day school at least twelve weeks in the year, six of these weeks to be consecutive. Children attending private school, those who had mastered the subjects taught in the public schools, and those physically incapacitated, were

⁸⁷ Governor Littlefield's Message, January, 1883, p. 8.

⁸⁸ April, 1878, the Senate Committee on Education reported a bill placing a fine of \$100 on such town councils as failed to appoint a truant officer. This was later amended by giving the State Commissioner of Education power to appoint such officers for delinquent towns, the expense to be borne by the towns. This measure passed the Senate, but failed to gain attention in the House. (Providence Journal, April 11 and 12, 1878.)

In April, 1881, a truant bill along the same lines as the law of 1883 was before the General Assembly. The act passed the House April 12, but was finally postponed until the May session, 1881, at which session it was not considered. (Providence Journal, April 13, April 27, 1881.)

A truancy bill was again introduced at the January session, 1882. On March 1 it was given a public hearing and April 21 was laid on the table by the Senate. (Providence Journal, March 2, April 22, 1882.)

excused from this provision. No child under fourteen could be employed in a manufacturing or mechanical establishment, except during vacation, unless he had attended school twelve weeks of the year next preceding employment; and no child under fifteen could be employed who could not write his name, age, and residence. No child under ten years of age was to be employed in any mechanical or manufacturing establishment. An employer violating these provisions would be liable to a fine of \$20 for each offense. Each employer of children was required to keep on file a certificate of the place and date of birth of every child so employed, and in case the child was under fourteen, the certificate was to contain a statement of the school attendance signed by an official of the district school committee. The town councils were required to appoint annually one or more special constables to be truant officers.⁸⁹ These officers should inquire into all violations of the law when so directed by the school committee, and were required to visit each manufacturing establishment at least once a term. They were further empowered to demand of the employer the names of children under fifteen years and the certificates of age and schooling. A failure to produce such certificates would be regarded as evidence of illegal employment of children. Section 18 of this act repealed the law of 1853 and 1854. (Public Statutes, Chap. 60 and Chap. 169, Sec. 21-24.)

This law marked a decided step backward because it reduced the age limit for child labor from twelve to ten years, and repealed the act of 1853 which limited the hours of such labor. The law of 1853 prohibited children

⁸⁹ The law as originally passed referred only to town councils; by an act of May 29, 1884 (Chap. 457) this was amended by including "the city councils of each city."

under fifteen from being employed over eleven hours a day or before 5 a. m. or after 7.30 p. m. The act of 1883 repealed these provisions and substituted nothing in their stead.

The plan of appointing truant officers was a progressive step, but the law was weak in that the matter of appointing the officers remained optional with the towns and cities. The provision requiring employers to keep on file for inspection the age certificates of their minor employees, is a new and progressive feature, which we see developed in subsequent laws.

Administration of 1883 Law.—The administration of the 1883 statute was in many respects inadequate, yet, for the first three years after its passage, it was better enforced than had been previous laws.⁹⁰ The school commissioner reported that all but ten cities and towns appointed truant officers, "and the law was enforced to a greater or less extent."⁹¹ In 1883, the number of children five to fifteen years of age not attending any school was 14,706;⁹² in 1885, this number had been reduced to 11,222.⁹³ Several of the towns complained that their enforcement of the law placed them at a disadvantage with neighboring competitors. Strange to relate, the city of Providence ignored the statute.⁹⁴

The Ten-Hour Law of 1885.—It was soon recognized that a mistake had been made in repealing all restrictions on hours of labor. In 1885, an act was passed limiting the hours of work for women and children in manufacturing establishments to ten hours a day and sixty hours a week. (Public Laws 1885, Chapter 519.) This im-

⁹⁰ See Governor Bourn's Message, January, 1885.

⁹¹ Report of Commissioner of Public Schools, 1885, p. 15.

⁹² *Ibid.*, 1883.

⁹³ *Ibid.*, 1885.

⁹⁴ *Ibid.*, 1885, p. 15.

portant law will be discussed in a chapter on "The Hours of Labor."

The Truant Law of 1887.—The law of 1883 was termed by the commissioner of public schools a "permissive" measure, since it contained no coercive provision to cause the towns and cities to appoint truant officers. The school authorities said the employers were ready to recognize their obligations "if the law could be made compulsory so as to place the manufacturers of all towns on an equal footing."⁹⁵ There had been improvement during the three years following 1883, but in 1887 there was a sudden increase in the number of absentees.⁹⁶ By the national census of 1880, it appeared that only one of the States and territories—New Mexico—stood lower than Rhode Island in the illiteracy of its foreign-born population.⁹⁷ The State census of 1885 seemed to show that the children of the foreign-born were making educational progress, while the children of native parents were going backward.⁹⁸ The State census and the school reports give the mill towns as leading in absenteeism.⁹⁹

To meet these conditions, the truant law of 1887 was

⁹⁵ Report of Commissioner of Public Schools, 1884, p. 12; 1885, p. 112.

⁹⁶ *Ibid.*, 1887, p. 125.

⁹⁷ Report of Commissioner of Industrial Statistics, 1887, pp. 72, 73.

⁹⁸ *Ibid.*, p. 74.

⁹⁹ The state census, 1885, shows 8,001 children, seven to fifteen years of age, at work. Of these, 6,420 were in mechanical or manufacturing establishments. The commissioner of industrial statistics was of the opinion that these children did not attend school the requisite time.—Report Commissioner Industrial Statistics, 1888, p. 122.

School attendance was lowest in the towns of Warwick, Warren, Coventry, North Smithfield, Johnson, Smithfield, Lincoln and Providence. The towns of Woonsocket, North Smithfield, Warren, Coventry, and Lincoln were leaders in illiteracy.—State Census of 1885, cited by Commissioner Industrial Statistics, 1888, pp. 124, 125.

passed. (Laws of 1887, Chapter 649.) The bill as passed by the House placed the age limit at twelve years and the minimum school attendance at twenty weeks.¹⁰⁰ Mr. Freeman was opposed to such a law because it would cause children between ten and twelve to "loaf in idleness" during vacation.¹⁰¹ Mr. Curtis thought work between ten and twelve years was beneficial.—"If they are not employed in the mill, they would be engaged in some other deviltry."¹⁰² The reduction of the minimum school attendance to twelve weeks and the age limit to ten years, was advocated before the Senate committee by a number of prominent manufacturers, school committees, and the commissioner of public schools.¹⁰³ The House vigorously opposed the Senate amendment giving the school committee power to excuse children from attendance. The Senate threatened to kill the entire bill if this clause was not incorporated and the House submitted.¹⁰⁴

The most important clause of this act provided that fifty per cent. of the State school appropriation be withheld from towns not complying with the truant law. It was thought this would give the coercive element which was so plainly lacking in previous truant laws. The general context of the law is similar to that of 1883. There are, however, some important differences. For instance, the law states that no child under ten years of age should be employed in any manufacturing, *mercantile, telegraph* or *telephone* establishment, *while school was in session*. The law is hereby strengthened in one respect and weakened in another, for the act of 1883, while it applied only to manufacturing establishments, prohibited the employ-

¹⁰⁰ Providence Journal, April 23, 1887.

¹⁰¹ *Ibid.*, March 11, 1887.

¹⁰² *Ibid.*

¹⁰³ Providence Journal, May 6, 1887.

¹⁰⁴ *Ibid.*, May 7, 1887.

ment of children under ten years of age at *any* time. A refusal by the employer to show certificates was punishable with a fine of \$10; the old law simply held that such refusal would be deemed an evidence of illegal employment of children. The appointment of city truant officers is placed with the Board of Aldermen instead of the city council. One of the weakest parts of the law is that giving the school committee power to excuse children from school attendance for the required twelve weeks. Perhaps, the Senate was conscious of this fact.

Enforcement of the Law of 1887.—This law was not enforced. We find the State Board of Education, 1888, saying: "We have a truant law, but it is not enforced—in many places it is utterly disregarded.—Appointed by the party in power, they [the truant officers] have a strong inclination to serve their friends and cater to their interests. In many towns their compensation is not enough to support them, and as overseers they become employers of these very children who should be in school."¹⁰⁵ In Woonsocket, children "reached the age of fifteen in a surprisingly short time" and truant officers were removed if they did not "please the 'bosses.'"¹⁰⁶

For the years 1885-1888, the State's school population between five and fifteen years increased 6.2 per cent. It is natural to suppose that about one-half, or 3.1 per cent. of this increase would be for children ten to fifteen years of age. We find, however, that the number of children of the latter age increased only 1.1 per cent.,¹⁰⁷—showing

¹⁰⁵ Report, 1888, pp. 14-15.

¹⁰⁶ Letter of Supt. McFee, Woonsocket Public Schools, Dec. 14, 1887. (Report of Commissioner of Industrial Statistics, 1887, p. 19.)

¹⁰⁷ Report of Commissioner of Industrial Statistics, 1888, p. 125.

The town of Warwick for this period showed a gain of 817 for children five to fifteen years, and a gain of only 64 for those of ten to fifteen years.

that either the mortality of such children was unusually large, or the veracity of their parents unusually small. For the year 1889, in the town of Johnston, which then included the manufacturing center, Olneyville, less than fifty per cent. of the children of school age were in regular attendance.¹⁰⁸ During the same year, Governor Taft found it necessary "to call attention to the evasions of the truant law."¹⁰⁹

Commissioner Stockwell thus sums up the causes for the poor administration of the law:¹¹⁰

1. Indifferent Public Opinion: "The people had not yet become sufficiently aroused to give voice to their belief.
2. Indifferent Officials: Truant officers had no interest in education.
3. Opposition of Manufacturers: The interests of persons of power and influence was opposed to the enforcement of the law," and the official finds it easier to yield to such influences than to withstand them.

School Law of 1893.—At the May session, 1893, the law of 1887 was amended so as to require that all children between seven and fifteen years should attend school eighty full days of each year. (Laws 1893, Chapter 1213). This increased the school period by twenty days, as the previous requirement had been twelve weeks, containing sixty school days. It has been seen that the existing laws were not well enforced. Could parents and employers, who had disregarded the law requiring sixty days school attendance, be expected to enforce the one requiring eighty days? The law states definitely, that children

¹⁰⁸ Report of Commissioner of Public Schools, 1889; Appendix, p. 24.

¹⁰⁹ Message of Governor Taft, January, 1889.

¹¹⁰ Report of Commissioner of Public Schools, 1887, p. 124.

lawfully employed—those ten years of age and upwards—were exempt from the eighty day rule; this exemption had been implied, but not expressed in the laws of 1883 and 1887. A provision is also added that children destitute of suitable clothing should be excused from attending school.

Administration of the Ten Year Age Limit.—The age limit for employing children in manufacturing establishments was reduced to ten years by the law of 1883. Was this provision of the law enforced? Necessarily it was better observed that the twelve year limit, but the sad fact remains that even this low age requirement of ten years was frequently disregarded. This abuse of child labor was one chief cause for the factory act of 1894. These violations occurred not only during the early '80's, but also after 1885 when the movement for labor legislation had taken definite shape.

The commissioner of industrial statistics reported in 1887 that "the law in regard to child labor is not generally observed." In visiting the mills he had found children at work "who could not have been over eight years of age." It was explained that these children were only visitors who had brought the dinner of older members of their families, or who were taking, for a few minutes, the places of their older brothers or sisters.¹¹¹ At Jackson and Fiskville children under ten were employed.¹¹² In another mill the children were closeted when the truant officer came around.¹¹³ In one town when the mill owner discharged twenty-six children as under age, they went across the township line and were employed in a rival

¹¹¹ Report Commissioner of Industrial Statistics, 1887, pp. 17, 18.

¹¹² Report Commissioner of Public Schools, 1887, p. 30.

¹¹³ Speech of Mr. Newell, of Lincoln, House of Representatives, March 10, 1887. (Providence Journal, March 11.)

mill.¹¹⁴ Instances were cited of the French-Canadians sending their children at the age of eight years into the mills.¹¹⁵ In 1888, the United States commissioner of labor made a report on the working women of large cities. Of 610 women included in the report for Providence, two had begun work at 7 years, two at 8, eleven at 9, and twenty-six at 10 years of age.¹¹⁶

In 1890 the charge was made that in Warwick thousands of children were employed contrary to the statutes.¹¹⁷ The commissioner of public schools for the same year was of the opinion that in many cases children "much younger" than ten years were forced into the mills and shops.¹¹⁸ A clergyman wrote that he knew of children "seven, eight, nine, and ten years old working for five and ten cents a day;"¹¹⁹ another churchman told of "hundreds working ten hours daily, from eight to ten years."¹²⁰ Added to this evidence are the numerous complaints by mill workers against the violations of the law.¹²¹

¹¹⁴ Speech of Mr. Freeman, General Assembly, March 10, 1887. (Providence Journal, March 11.)

¹¹⁵ Speech of Representative Newell, March 23, 1888.

¹¹⁶ Report of United States Commissioner of Labor, 1888, p. 149.

¹¹⁷ Speech of State Senator Owen, May 2, 1890; Providence Journal, May 3.

¹¹⁸ Report of Commissioner of Public Schools, 1890, p. 136.

¹¹⁹ Fifth Report Commissioner Industrial Statistics, p. 25.

¹²⁰ *Ibid.*

¹²¹ Returns of employees to Commissioner of Industrial Statistics: Weaver—"We see with sorrow children employed that are almost babies."—Report, 1889, p. 150. . . . Spinner, Lonsdale—"the truant law is not enforced, for there are boys here nine years of age that never go to school."—Report, 1887, p. 42. . . . Weaver—"Children are employed who should be at school. Many of them do not look to be six years of age."—Report, 1889, p. 153. . . . Cardmaker—"The child labor laws are totally disregarded," p. 154. . . . Can-room employee—"Small help are employed ranging from seven to fifteen years of age," p. 154.

The Factory Inspection Act of 1894.—The numerous violations of the law, gave impetus to a movement for the appointment of a state factory inspector, and for increasing the age limit to twelve years. Beginning with the year 1890, a more active public interest seems to have been taken in child labor. The commissioner of industrial statistics, for 1891, wrote: "Moral influences have been at work upon both parents and those employing children. That people of all classes more fully realize the fatal results of putting children to work * * * at an age when their bodies cannot stand the burden placed upon them, there can be no doubt."¹²²

Of seventy-four school officials, clergymen and physicians, replying to inquiries by the commissioner, one wished the age limit placed at 7 years; three at 8 years; twelve at 10 years; thirty at 12 years, six at 13 years; eleven at 14 years; and eleven at 15 years. Sixty of these men thought employment had a bad effect upon the health, morals and education of children; ten were of the opinion that such employment was beneficial.¹²³ It is an interesting illustration of the vitality of the old ideas regarding child labor, that of some seventy men representing the highest professions, *ten thought such labor advantageous, and sixteen placed the age limit at ten years, and four even as low as eight years.* But, as is seen, the majority were in favor of advanced standards.

Mr. Stockwell, commissioner of schools, was a powerful influence standing for the rights of the children; we find him, in 1894, saying:—"For fifty years then we see that there has been positive law against this perversion of child life and energy, and it still exists. Surely the State cannot have done its full duty by itself or by these

¹²² Fifth Report Commissioner Industrial Statistics, p. ix.

¹²³ *Ibid.*, pp. 61, 62.

little ones in allowing its authority to be thus set at naught."¹²⁴

Governor Davis, in 1891, pointed out that violations of the child labor law were "altogether too common," and recommended that the commissioner of industrial statistics be charged with the enforcement of these statutes.¹²⁵ In 1894, Governor Brown recommended that the age limit be placed at thirteen years, and called attention to the charge that many families came to Rhode Island because children could there be put to work at an earlier age than in neighboring States.¹²⁶ The various civic and charitable organizations of women—especially those represented in the Women's Council of Providence—were among the most influential forces supporting this progressive movement. The Democratic party had for several years been advocating the further restriction of child labor, and in 1891, the Republican state platform called for the enforcement of the child labor laws.

These influences forced the enactment of the factory law of 1894.¹²⁷ The measure prohibited the employment of children under twelve years of age, in manufacturing or mercantile establishments, and required that employers keep a register of the name, age, and birthplace of all children employed under sixteen years of age. The law applied to all manufacturing or mercantile establishments employing five or more persons. Children under sixteen were prohibited from cleaning machinery while it was in motion. The Governor was authorized to appoint two factory inspectors, one of whom should be a woman, to

¹²⁴ Report, 1894, p. 236.

¹²⁵ Governor Davis' Message, January, 1891.

¹²⁶ Governor Brown's Message, January, 1894.

¹²⁷ A similar measure was before the Assembly in 1890, and was passed by the House. (*Providence Journal*, March 28, 1890.) The bill, in various versions, was presented several times during the succeeding three years.

inspect the establishments and enforce the law. Any person who knowingly permitted any child to be employed in violation of the act would be liable to a fine of not over \$500. (Laws of 1894, Chap. 1278). The other provisions of this law will be discussed in a chapter on "Factory Acts."

Several laws were subsequently passed which strengthened the statute of 1894. In 1898, the school committee of the city of Providence were authorized to divide the school year into two equal terms, and all children between seven and fifteen were required to attend for at least the whole of one term of each year. The same exceptions were made as in the truant law of 1887. (Laws of 1898, Chap. 587).

By an act of 1899 (Chap. 708) the factory inspectors were required, in addition to their other duties, to enforce the ten hour law regarding the labor of women and children. Another important measure regarding the administration of the truant law was that of 1901 (Chap. 924), providing that the town school committees, instead of the town councils, should appoint the truant officers, whose salaries should be paid out of the school appropriation. Hitherto, the town councils had fixed the compensation of these officers, and there had been no special fund for this expense.

Truant Law of 1902.—During the eight years following 1894, the matter of compulsory school attendance gained increased attention, this being due in large measure to the persistent efforts of School Commissioner Stockwell and Mr. G. E. Whittemore, Truant Officer of Providence. Commissioner Stockwell pointed out that the State had been "derelict in its duty in this matter of the enforcement of the compulsory law," and that Rhode Island had "practically become a dumping ground where

neighbors on the North and West deposited their poorest and least welcome inhabitants."¹²⁸ The philanthropic and civic organizations of Providence urged the enactment of a better law. Political influences also entered, as elections were being more closely contested and the Democratic party, under the leadership of Dr. Garvin, by its advocacy of labor legislation, was making a strong plea for the labor vote.

The truant law was passed in 1902 (Chap. 1009), was drafted by a committee of the State Teachers' Association, and was a modification of a bill drawn by Mr. Whittemore. By this act, the age limit for the employment of children during *the school session*, was raised to thirteen years. The weakening exception was made authorizing the school committee to excuse a child twelve years of age, upon the written statement by the overseer of the poor that the wages of such a child were necessary to the support of the family, or that the child was destitute of clothing suitable for attending school. During vacations, the law of 1894 still held, making the age limit twelve years. Vacations were, however, made much shorter, as children under thirteen were required to attend school during the entire session. The clause fixing a penalty reads: "Every person, whether principal or agent, who shall employ or permit to be employed or shall aid or abet the employment of children" in violation of this act "shall for every such offense or neglect of duty be fined not exceeding twenty dollars." It is seen that this is an improvement over previous provisions, for the penalty applies to both parents and employers, and the weakening word—"knowingly"—is omitted. This statute, in so far as not in conflict with the factory act of 1905, is the truant law at the present time.

¹²⁸ Report of Commissioner of Public Schools, 1900, p. 78.

Administration of the Child Labor Law, 1894-1905.—During the decade following the passage of the factory inspection act, conditions regarding child labor showed decided improvement, but it cannot be said that the law was rigidly enforced. From many different sources, the writer has been informed that during this period no serious attempt was made by the inspectors to carry out the provisions of the statute. It cannot be accurately ascertained how far these charges are true. However, this at least may be said: the inspectors seem not to have been very strenuous in their inspections and the manufacturers were not troubled with prosecutions. Still, there was a substantial gain. Perhaps the inspectors were weak on prosecution but strong in persuasion. The mill owners were more fully realizing the evils attending the employment of young children, and the expression of public opinion as contained in the statute caused many to adopt a more progressive attitude. The statistics of school attendance are generally a fair index of conditions of child labor. The following are taken from the reports of the school commissioners:

	Percentage of enrollment to school population.	School population 5 to 15 years inclusive.	Children 5-15 years not attending any school.	Children 7 and under 15 not attending any school.	Children 7 and under 15 attending less than re- quired period.	Percentage average at- tendance public schools.
1890.....	81.5	64,960	12,044	4,292	755	64.2
1892.....	81.8	69,004	12,558	4,164	658	70.2
1893.....	81.7	71,851	13,134	4,387	748	67.0
1894.....	83.8	73,290	11,877	3,505	2,371	69.3
1895.....	85.4	73,175	10,659	2,688	1,634	70.8
1900.....	87.4	82,239	10,357	2,392	1,224	70.1
1905.....	83.7	95,377	15,558	1,208 ¹²⁰	....	75.4

¹²⁰ Children seven and under thirteen not attending according to law of 1902.

The statistics show that the number of children seven and under fifteen years of age not attending school has steadily declined, and that the percentage of enrollment has, for the most part, increased. This tends to indicate that child labor has decreased. However, the large percentage of daily absentees from the public schools—some 30 per cent.—points in the opposite direction.

Improving conditions are indicated by the national census statistics of wage earners in Rhode Island manufactures.¹⁸⁰

	Total	Men over 16	Women over 16	Children over 16
1880.....	62,887	37,060	18,270	7,548
		58.9%	29.1%	12.0%
1890.....	81,111	49,684	25,602	5,825
		61.2%	31.6%	7.2%
1900.....	98,813	64,508	29,269	5,036
		65.3%	29.6%	5.1%

The reports of the factory inspectors show that the percentage of employees under sixteen years of age has steadily declined since the establishment of the department. In 1894, of the total number of workers, 8.5 per cent. were under sixteen; by 1907, this had been reduced to 4.5 per cent.¹⁸¹ It will be noted that there is a close

¹⁸⁰ Twelfth U. S. Census, Vol. VIII, p. 808.

¹⁸¹ Report Factory Inspectors, 1907.

Year	—Number of—		Per cent. of children
	adults employed	children employed	
1894.....	55,109	5,217	8.5
1895.....	53,523	4,473	7.7
1896.....	50,068	4,065	7.5
1897.....	56,072	4,786	7.9
1898.....	63,259	4,539	6.5
1899.....	72,296	4,666	6.0
1900.....	76,552	5,253	6.4
1901.....	81,496	5,068	5.8
1902.....	86,043	5,477	6.0
1903.....	90,165	6,451	6.7
1904.....	88,545	5,895	6.2
1905.....	112,377	6,917	5.8
1906.....	123,112	6,932	5.3
1907.....	131,059	6,150	4.5

agreement between the statistics of the national census for 1900 and the inspectors' report for that year; the census gives the number of employees under sixteen years as 5,036; the report places the number at 5,253.

There is, however, evidence that the law was not strictly enforced. Miss H. B. Sewell, writing of child labor conditions in a bulletin of the United States Bureau of Labor, 1904, says:—"There was evidence that children under twelve years of age were employed, and that children between twelve and fifteen years of age were employed without school attendance. In some manufacturing towns the provision for schooling was not sufficient to accommodate all children of school age and the proportion of those who attended fell below the average for the State. In these towns the salaries of the truant officers were often so small that they could give very little time to the duties of the office, or their interests were opposed to a zealous search for truants. The villages belonging to these towns were largely inhabited by French-Canadians and Italians who had come for employment in the mills, many of whom were eager to profit by their children's labor, and occasionally succeeded in securing employment for children under twelve years of age."¹⁸²

This must, however, be pointed out here: of the 1,213 children in ten factories, 78 were especially investigated by Miss Sewell. Of these 78 children, none was found to be under twelve years of age, and only one had been under age when first employed.¹⁸³

In the United States census bulletin No. 69, is contained the results of a special investigation of child labor in the *cotton mills* of township of Warwick, for the year

¹⁸² Bulletin of U. S. Department of Labor, 1904, p. 488.

¹⁸³ *Ibid.*, p. 520.

1900. Forty-five children under twelve were found employed. Of these, three were 9 years of age; six were 10 years; and thirty-six were 11 years of age.¹⁸⁴ The number of children between the ages of ten and fourteen employed in gainful occupations is given as 491,¹⁸⁵ of which 488 were in the cotton mills.¹⁸⁶ It appears, therefore, that at least 42 of the 45 children under twelve were in the cotton mills. For the *entire State*, the number of operatives under twelve in the cotton mills is given as 65.¹⁸⁷ It has been seen that 45 of these were in Warwick. The question arises whether or not the returns for all parts of the State were as carefully made as those given for Warwick. Is it probable that of the violations of the child labor law in cotton mills, three-fourths of such offenses occurred in this single town. This report deals only with cotton mills and does not consider violations in other industries.

For conditions in February 1905, Mr. Owen Lovejoy says:—"In Rhode Island, where a twelve year age limit is legal for work in the mills, and school children of twelve may be granted a certificate to labor upon recommendation of the overseer of the poor, it would seem that a standard so low would invite universal obedience. On the other hand it is found that there are townships in which no effort is made to enforce even this minimum requirement, and children ten and eleven years of age are found in the mills, while of the twelve-year-old children, only a few appear ever to have heard of such an article as an age or schooling certificate."¹⁸⁸

At the request of the House Committee on Special

¹⁸⁴ U. S. Census Bulletin, No. 69, p. 56.

¹⁸⁵ *Ibid.*, p. 56.

¹⁸⁶ *Ibid.*, p. 49.

¹⁸⁷ *Ibid.*, p. 43.

¹⁸⁸ *Annals Amer. Acad. Pol. and Soc. Science*, Vol. XXV, p. 45.

Legislation, the National Child Labor Committee, in March 1905, made an investigation of child labor conditions in the principal factory sections of the State and reported that young children in unusually large numbers were employed in gainful occupations, and that illiteracy among the factory children was alarmingly prevalent. In many factories children twelve and thirteen years of age were employed to labor at night; and it was a common practice to utilize children even below this minimum legal age by permitting them in the mills as helpers of older members of the family, or of other persons.¹⁸⁹

These were conditions as to the enforcement law in the last years of the period, 1894-1905. It is not probable that the administration was more efficient during the earlier years of that decade. Therefore, as was indicated in the introductory sentences of this section, it may be said that though conditions improved, there were still many lapses in the administration of the law.

The Law of 1905.—In 1905, the forces against child labor in Rhode Island combined to raise the age limit to fourteen years. Massachusetts and Connecticut had long since passed such a law, and the low standard of Rhode Island caused many low grade workers to move into the State in order to put their children in the mills at an earlier age. The National Child Labor Committee sent its best men to Providence to direct the fight for the law. Chief Factory Inspector Hudson coöperated with these men and it was chiefly through his influence that a bill containing practical, rather than very advanced, provis-

¹⁸⁹ Particular instances cited by the report: "Little Mary ———, who is only twelve years old, has already been in the factory a year. Albert ———, who is thirteen, weighs 50 lbs., and is less than 4 feet tall. . . . Alfred is twelve and has been working since September. . . . Arthur ———, who is fifteen years old, has worked four and a half years; he could read when he left school at ten years of age, but has forgotten now."

ions, was presented to the Legislature. A bill of a different nature would not have passed the State Senate. The interests of organized labor were represented by Messrs. T. F. Kearney and T. P. Powers, while Bishop McVickar marshaled the powerful influence of the church. Governor Utter gave the movement splendid support and is still one of the foremost champions of the children's rights.

By the act which passed March 9, 1905 (Chap. 1215), it was decreed that no child under thirteen, on or before December 31, 1906, and no child under fourteen after that date, should be employed in any factory, manufacturing or business establishments within the State. Employment of children under sixteen before 6 o'clock A. M. or after 8 o'clock P. M., was prohibited. An exception was made so that the restriction should not apply to mercantile establishments on Saturday or on the four days immediately preceding Christmas of each year. Children under sixteen were prohibited from working in any manufacturing or business establishment unless provided with a certificate certifying that such child before December 31, 1906, was thirteen years of age, and after that date, that the child was fourteen years of age. This certificate was to be issued by the school committee and substantiated by an attested copy of birth certificate, baptismal certificate, or passport, stating also the name and place of residence of the person having control of the child. Employers refusing to show certificates to inspectors are liable to a fine of not less than \$10 nor more than \$50. It was specifically provided that the law should *not* apply to children employed in *household service or agricultural pursuits*. The penalty for violation of the act either by employers or by parents is, as in the law 1894, a fine of not more than \$500.

The exceptions by which children are allowed to work at night on Saturdays and four days previous to Christmas, are objectionable features of the law. The same is true of the exemptions as to domestic and agricultural labor. But it would have been impossible to pass the bill without these exceptions. Legislation of this character is of slow growth and its advocates must content themselves with a step at a time. It seems approximately certain, however, that the law will eventually be revised so as to apply to every form of child labor, and that the age limit for employing children will be raised to sixteen years.

By an act of 1907 (Chap. 1458) the child labor statute of 1905 was amended so as to apply to every person, firm or corporation, employing any child under sixteen years of age. Previous to this act, the law did not apply to establishments employing less than five persons.

Present Administration of the Child Labor Law.—To ascertain the exact conditions of the administration of the child labor law is extremely difficult. There is danger of placing emphasis on unusual rather than typical instances of violation. Politics enters the discussion and charges are made by those who have a longing eye for a position in the inspection bureau. A white light beats upon every public office, and an official will make enemies no matter what policy he adopts.

Numerous charges have been made that the law is flagrantly violated. The factory inspectors flatly deny all such statements. The writer has endeavored to make an unbiased study of the matter, and to him the truth seems to lie between these two positions. It appears that the violation of the law is not so flagrant as critics charge, nor the enforcement so efficient as the inspectors would have us believe. The law would probably be better en-

forced if the opinion of the average citizen on this subject were active and militant rather than passive and perfunctory. The preacher and teacher, the school officials and philanthropic individuals are aroused to the necessity of preventing child labor, but the matter does not much concern the citizen of average intellectual and business interests. Not until the general public makes an *active* demand for the strict enforcement of the law, will it be so enforced.

In order to obtain information as to the administration of the law, the writer accompanied the inspectors upon their visits to some dozen factories in Providence, Pawtucket and Woonsocket; and worked as a laborer in several establishments in Providence and the Blackstone Valley. While so engaged in the mills, lodging was secured in factory boarding houses, and throughout the summer of 1907 the writer was more or less in contact with the factory workers.

The inspectors' inquiries into the conditions of the mills visited appeared to be by no means thorough, in fact they seemed rather perfunctory. It is not known if this was the usual method of inspecting; it may have been that the examination was purposely made rapidly so as to show the writer as much of the establishments as possible. Though the inspection was of this cursory character, children without certificates were found in several of the mills and few of these children gave their ages as under fourteen. It is probable that had the inquiry been more searching other such children would have been found.

The writer counted forty-six small children entering one of the two main entrances to a large woolen mill in Providence. If size be taken as a criterion, many of these children did not appear to be fourteen years of age. In a large building of Providence devoted entirely to jewelry

establishments, there are two shops known among the workers as "the kindergartens." It is highly probable that these two establishments employ many children in violation of the statute. On the bulletin of this building were notices calling for "small girls" to work in the jewelry shops.

In the braiding room of a Providence factory, there were two children employed who were almost certainly under age. One of these children said he had learned to operate a braiding machine in a town of Scituate. The North Providence mills employ a number of children, who are not larger than the newsboys who give their ages as twelve years. A large department store in Weybossett street, Providence, has a large percentage of children among its employees. Some of these little workers are very small and delicate. If a considerable percentage of the children employed in several Woonsocket mills are not under age, it is evident that children now-a-days are either not growing to the usual size or they are developing rather late in life. In North Smithfield, children form a large part of the mill force. As a rule, these do not seem to be under fourteen years of age, but their wretched physical appearance perhaps indicates that they have been long employed amid unsanitary surroundings. The condition of child labor in Burrillville was better than the writer had been led to expect. There was, however, one mill in this township which employed children who were certainly not over ten years of age.

The writer questioned many of the mill workers as to the enforcement of the law. Several of these were of the opinion that the law was well enforced; a greater number were emphatic in their statements that the administration of the statute was "a farce." The several trade union officials interviewed were, without exception, of the opin-

ion that the law was absolutely disregarded, and some of them made the charge of collusion between the manufacturers and the chief factory inspector.

Mr. Gilbert E. Whittemore, truant officer of Providence, in his report, September, 1907, had this serious complaint to make against the factory inspectors:—

“Numerous cases have come to my knowledge of illegal employment of children, who should be in school, and the process of ordering children in such cases to quit such employment, which seems to be the only method employed, is getting decidedly stale and ineffective. One single break of seventeen children from one school to employment unauthorized either by age or certificate occurred this year and in some of these cases the parents refused my request that the children be immediately returned to school. * * * These parents stated in open court that they had been promised immunity from trouble by the parties employing, if they allowed their children to work, but the prospect of continued fines of twenty dollars and costs weakened the guaranty effectively. Threats of like process in the other cases in case of obstinacy returned all of the children to school.

I have also with reluctance prosecuted children as truants who were illegally working, and whose parents shirked the responsibility of such employment. Such children have stated in open court that they were employed, given name and location of employer, stated their wages, and, in one instance, presented a pay envelope.

I do not believe that this is the proper or fair way to enforce the child labor laws. I think that employers, not parents or children, should be prosecuted for violations of child labor laws, but I do not think that Providence employers should be prosecuted unless employers in all

parts of the state are treated exactly alike. I do not believe that the child labor laws can be enforced by persuasion."

Mr. Whittemore stated to the writer that during the year ending June 30, 1907, he notified the factory inspection department of 93 cases of illegal employment, but the inspectors did not institute proceedings against any of the offending employers.

This evidence seems to point to the conclusion that the child labor law is not rigidly enforced, and that the public would be justified in demanding a more efficient administration of a statute which is of vital importance to the welfare of the State.

CHAPTER III.

HOURS OF LABOR.

From the earliest days of American trade unions, one of the chief demands of organized labor has been that for a shorter working day. As far back as 1825, this question formed the basis for associations of laborers, and at the present time the movement for an eight-hour day is one of the main issues supported by union men. Therefore, a history of the movements for changing the hours of work is, in part, also a history of Rhode Island trade unions.

Like the use of child labor, the long hours of work in the early factories were a survival of the old domestic system under which the workers in their own homes forced themselves and their children to labor from early morning until far into the night. It is in the industries closely resembling those under this domestic system—such as sweat shops and home seamstress work—that the longest hours are still to be found.

The successful cultivation of New England farms required long hours of labor. Their owners were hard workers and frugal livers; they did not spare themselves and they expected the same sustained labor from their farm help.¹ When the New England farm hand, or the girl trained by the housewife, went into the mills, they carried with them these habits of labor. Long hours were considered a matter of course.

¹“A day’s work in 1820 was from sun rise to sun set, and in haying time anywhere up to 9 o’clock at night.”—T. R. Hazard: *Miscellaneous Letters and Essays*, p. 123.

Conditions During Early Part of 19th Century.—Commissioner Oliver of Massachusetts says of early mill conditions in New England: "The system of long hours was first adopted as in England, and the operatives went to work before breakfast. For this meal thirty minutes was allowed and for dinner forty-five minutes. The general length of time per day was fourteen or fifteen hours."² The press praised the prosperous condition of England where weavers obtained constant employment working fourteen to sixteen hours a day.³

To keep the worker busy from sun to sun—and after, was considered an end devoutly to be sought. We read: "The usual working hours being twelve, exclusive of meals, six days in the week, the workmen and children thus employed have little time to spend in idleness or vicious amusement."⁴ Seth Luther, the labor leader, claimed that, in general, thirteen hours of actual work was required by the New England mills. At the Eagle Mills, Griswold, Conn., fifteen hours, ten minutes of actual labor was the rule.⁵ To make matters worse, these hours were measured by *factory* time which was about twenty-five minutes behind *solar* time: the mills started by solar time, but stopped by factory time.⁶

Several writers have drawn very dark pictures of the early factory conditions.⁷ It is probable that the estimates

² Report Massachusetts Bureau Industrial Statistics, 1870, p. 91.

³ Providence Patriot, May 30, 1829.

⁴ Letter of Smith Wilkinson, Pomfret, Conn.; White's Memoirs of Slater, p. 126.

⁵ Luther: Address to Workingmen of New England, p. 21.

⁶ Grieve: History of Pawtucket, p. 98; Luther: Address to Workingmen of New England; cf. N. H. Gazette, quoted by Providence Patriot, April 7, 1832; Address of Providence Workingmen to the Public, Providence Patriot, April 14, 1832.

⁷ "To be as they are, like the brutes which perish and possessed only of instinct; deprived of the liberty of thought, speech and body;

have somewhat exaggerated the existing evils. Long hours of work seem to have been the chief complaint made by the laborers. Most of the mills were small and sanitary conditions were not then pressing problems.

Union Labor Demands A Shorter Day, 1825-1835.—The trade union movement in New England may be regarded as beginning with the year 1825,⁸ and from its inception concerned itself with the hours of labor. The lecture of Edward Everett before the Charlestown Lyceum in 1830, gives evidence that there was some public recognition of this agitation.⁹ The Providence Association of Mechanics and Manufacturers had been founded in 1789, but it cannot be considered a labor organization.

The laborers of Rhode Island were among those most active in this early demand for a shorter working day. December 5, 1825, delegates from five New England states met in Providence and approved the proposals for limiting the hours of labor.¹⁰ This meeting called a convention to meet in Boston, Feb. 16, 1826, at which time a general association of New England was formed. March 3rd, of the same year, the Providence Association

one would think they must sometimes at least imagine themselves on the confines of the lower regions, and that without much stretch of the imagination." Thomas Mann: *Picture of Woonsocket*, 1835, p. 16.

Owing to the commercial depression of 1829, "in too many cases the manufacturers had lost sight of the human beings who operated their machines, and they too often mistook injustice and cruelty for order and discipline. I know of one who was in the habit of flogging the children in his employ out of sheer wantonness. . . . Many of the mill owners were of the loosest morals, and the factory girl was fortunate who preserved her honor and her position." Richardson: *History of Woonsocket*, pp. 171, 172.

⁸ R. T. Ely: *Labor Movement in America*, p. 40.

⁹ First Report Massachusetts Bureau Industrial Statistics, p. 93.

¹⁰ Jones: *Transformation of Providence from a Commercial to a Manufacturing Community*, p. 111.

of Workingmen was organized to support the demand for the ten-hour day and thus secure for the factory children some of the advantages of public education.¹¹

The movement gained momentum in the early thirties. During the decade following 1829, the Democratic party was in active sympathy with the plans of the workers; in fact, it came near being a workingman's party.¹² We know, that the "Republican Herald," the chief democratic organ in Rhode Island, was at first neutral as to the demands of the unionists, but later became their champions, and through its columns the desires of the workingmen were made known to the public. At a meeting of the mechanics of Providence, Sept. 29, 1831, it was shown that the mill hands of Taunton and other towns had discontinued the practice of "working by candle light," and, following their example, the Providence laborers declared they would work only "from the rising of the sun to the setting of same."¹³

On the 10th of October, the workingmen voted to "consider ten hours of actual work sufficient for a day's work." At this meeting the argument was advanced that the interest of the public should be given first place: "if it would be a public benefit for the mechanic to work fifteen hours, we ought to do it; * * * if ten hours work per day is a public benefit our employers ought to be satisfied, notwithstanding it be to their disadvantage."¹⁴ This meeting called a convention to be held in Providence the first Monday in December. Many mill towns sent delegates to this meeting of December 5th,

¹¹ *Ibid.*, p. 111; *Columbia Phoenix*, March 24, 1826; *Mfg. & Farm. Jour.*, March 24, 1826.

¹² Ely: *Labor Movement in America*, p. 43.

¹³ *Providence Patriot*, Oct. 1, 1831.

¹⁴ *Providence Patriot*, Oct. 15, 1831.

and a general convention of New England workers was planned to meet in Boston, Feb. 16, 1832.¹⁵

This convention was attended by seventy-six delegates from the important factory towns of Rhode Island, Massachusetts, Connecticut, and New Hampshire, and during a two days' session, the organization of the New England Association of Farmers, Mechanics and other Workmen, was formed. Plans were outlined for an effective campaign against the long working day. The report of the committee on education shows that the workers were keenly alive to the situation :

"The opportunities allowed to children and youth employed in manufactories to obtain an education suitable to the character of American freemen, and the wives and workers of such, are altogether inadequate to the purpose: That the evils complained of are unjust and cruel; and are no less than the sacrifice of the dearest interests of thousands of the rising generation of our country to the cupidity and avarice of their employers. And they can see no other result in prospect, as likely to eventuate from such practices, than generation on generation, reared in profound ignorance and the final prostration of their liberties at the shrine of a powerful aristocracy."¹⁶

This convention attracted much attention to the workmen and caused their demands for a shorter work day to be supported by some of the leading papers of the time.¹⁷ At a meeting of the Providence mechanics, February 25, it was decided to form an association auxiliary

¹⁵ Grieve: *History of Pawtucket*, p. 98.

¹⁶ Grieve: *History of Pawtucket*, p. 99; *Proceedings of New England Association of Farmers, Mechanics, etc., 1832*, republished in *Handbook Rhode Island Knights of Labor*, 1894.

¹⁷ Cf. *Boston Transcript* editorial, quoted by *Providence Patriot*, Feb. 29, 1832.

to the Boston organization in order to put into effect the resolution there adopted.¹⁸ The movement continued to gain in strength during the succeeding months.¹⁹ In an address of the Providence workingmen to the public, the citizens were asked to leave for a moment the question of the "American System" of protection to manufacture, and consider the effect of the prevailing system of labor upon the workmen and his children. The manufacturers were making education impossible by compelling their operatives to labor from daylight to eight o'clock at night. "The smallest child whose steps are sometimes quickened by the lash—the female, however feeble her constitution," must begin to toil "ere the sun has roused the lark."²⁰

After 1834, this movement, which had once been so bright with promise for the laboring man, began to decline, and gradually it disappeared before opposing forces. It is true, the Rhode Island workmen in 1834 protested against the banking system and sent a delegation to Washington to present their views²¹ but this activity was due to political rather than economic causes. It is probable the industrial depression following 1836, put a damper on the ten hour agitation: men were very glad to get work on any terms. Again, the majority of the mill workers did not own \$134 of real estate, and being, therefore, without the suffrage, could not directly influence legislation. During this decade, numbers of Irish immigrants came to New England; their standards of life were not high, and they displaced, in large degree,

¹⁸ Providence Patriot, Feb. 29, 1832.

¹⁹ Cf. Providence Patriot, March 7, March 24, April 4, 1832.

²⁰ Providence Patriot, April 14, 1832.

²¹ Republican Herald, Feb. 15, 1834; also see letter in Mfg. & Farm. Jour., April 3, 1834.

the native mill workers.²² Another cause for the lapse of the labor movement after 1834, seems to have been that the thoughts of the people were occupied by other matters, such as the financial policy of the national government, the anti-masonic agitation, and prohibition.

The Law of 1853.—About the middle of the century, the demand for a ten-hour day again became a feature of legislative discussions. During the period 1840-50 there was much agitation among the mill help of England for a shorter working day, and this probably had some influence in America. National legislation also encouraged the movement. In 1840, President Van Buren issued an order establishing the ten-hour day in all United States public works. With the growth of the factory system and the increased use of child labor, the concomitant evil of long hours forced itself upon the attention of the legislators.

As we have seen in a previous chapter, the Legislature, in 1851, found it necessary to order an investigation of child labor. Colonel Welcome Sayles, the investigating commissioner, in his report presented in 1853, had this to say of the hours of labor: "In this there is great disparity between the different establishments. There are a few mills that scarcely average to exceed 11 hours per day, certainly not to 11½ hours; very many that do not exceed twelve hours, perhaps the majority of them not more than 12½ hours; whilst there are mills, that from the best data that could be obtained, work 14 hours per day. There are mills during the last winter that com-

²² About the period 1836 to 1840 very material changes took place among the operatives. . . . Under the prejudice of nationality and the decrease of native help, the American element, the daughters of independent farmers . . . retired from the mill and factory and can no longer be found therein." First Report Massachusetts Bureau Industrial Statistics, p. 91.

menced work at 5.30 A. M. on all days but Saturday, and on that day at 4.30 A. M., as they left work earlier in the afternoon of that day—making more than 13 hours of labor in the very shortest days. There are but a small portion of the mills that work less than the *whole day*, however long. . . . To me, as to others, it seems far more disagreeable to see little, half-clothed children seeking their way to the factory in the very darkness of a winter's night, rather than in the hours of warmth and light."²³

As a result of this report and the many petitions from workingmen,²⁴ the act of January, 1853, was passed.²⁵ By this law, ten hours was defined as a legal day's work unless otherwise agreed by contracting parties. It was further provided that no child under twelve years of age should be employed in any manufacturing establishment for more than eleven hours of any one day, and not before 5 A. M. or after 7.30 P. M. The owner or employer "wilfully and knowingly violating these provisions was liable to a fine of \$20, one-half going to the complainant, the other to the district school fund.

Administration of the 1853 Law.—The provision for the ten-hour day for all workers was made void by the clause that contracting parties could agree upon a longer period of work. The principle that the State can restrict contracts made by adults was not then recognized—nor is its recognition generally accepted at the present time. Says the Providence Journal of that date, "To protect children against excessive labor is just and proper; to prevent men working as long as they please, is hardly possible."²⁶

²³ Report, p. 5 (Rhode Island Acts and Resolves, 1853).

²⁴ Mfg. & Farm. Journal, Feb. 5, May 12, 1852.

²⁵ Rhode Island Public Laws, 1844-1857, p. 945.

²⁶ Feb. 28, 1853.

There is no provision for the enforcement of the restrictions upon the hours of child labor. However, the working hours seem to have been gradually reduced. The manufacturers found this to be a good business policy; it was good economics. Certainly there was very little coercion. This reduction of the factory hours to eleven hours came about gradually, the employers who combined business sense and philanthropy, leading the way. In the early seventies, we find the eleven-hour rule to be in general practice. In a word, then, the employer decided whether or not he would observe this statute and his general decision was in the affirmative.

Repeal of the 1853 Law.—All restrictions on the hours of child labor, as contained in the statute of 1853, were repealed by section 18 of the truant law of 1883, (Chapter 363). By this act, Rhode Island was left without any limitation upon the length of the working day. It is difficult to see why this action was taken; the law was not interfering with the manufacturers, for the week's work had been reduced to about 66 hours and the practice of employing children earlier than five o'clock in the morning had ceased. Governor Bourn says in his message, 1885, that this repeal of all restrictions on the hours of labor was perhaps unintentional.

The Ten Hour Law of 1885.—The annulment of the law of 1853 gave impetus to the ten-hour day movement. The demand for such a law was not a sporadic development, for it had been a perennial principle of union labor. In 1869, the labor interests succeeded in persuading Congress to pass an act providing for an eight-hour day on all government work. By an interpretation given this law it became ineffective, but it remained a statute and perhaps influenced State legislation. For many years subsequent to 1868, the National Labor Union condemned

the practice of working women and children ten to fifteen hours a day as "brutal in the extreme and subversive to the health, morality and intelligence of the nation."²⁷ Throughout the seventies, there were strikes for the ten-hour day. In 1873 this was the cause of a protracted strike in the textile mills of Woonsocket and Olneyville.²⁸ A definite and sustained effort to secure this shorter work day began with the organization of the Knights of Labor. This labor organization practically forced the passage of the act embodying this reform.

The question was soon introduced in politics. In 1875, Governor Howard had urged the limitation of the hours of work for women and children,²⁹ and a decade later, Governor Bourn added his support to the movement.³⁰ In 1885, the platform of the Democratic party advocated such a measure. The Democrats claim that they forced the Republicans to pass the bill. There is no doubt that the former party was the more active in its support. In the elections of 1885, Pawtucket, which had been Republican, gave a Democratic majority on this issue. Woonsocket would have done likewise, had not the Republican nominating caucus passed resolutions endorsing the ten-hour bill. In Cumberland, the labor vote gave the Democrats a decided majority.³¹

At the January session, 1885, the workers stormed the Legislature with petitions and resolutions.³² Practically

²⁷ Ely: *Labor Movement in America*, p. 341.

²⁸ *Providence Journal*, May 26, 1873, *et seq.*

²⁹ Governor Howard's Message, 1875.

³⁰ Governor Bourn's Message, 1885.

³¹ Editorial, *Weekly Journal*, April 10, 1885.

³² Previous to 1885, there had been several attempts to secure a ten-hour law. Such an act was defeated in the Senate, Feb. 24, 1881, by a vote of 20 to 12. (*Providence Journal*, Feb. 25, 1885.) . . . March 22, 1883, a bill was introduced providing that minors under eighteen and women should not be employed in any manufacturing

every mill town in the State sent a petition praying for a shorter working day.⁸⁸ Over 16,000 names were attached to these papers. Some of these names were duplicates and others were not signed in person, but there is little doubt that the petitions represented the opinions of the great mass of mill workers. Some 238 persons and 91 corporations, representing the chief manufacturing interests of the State, appealed to the law-makers to defeat the bill.

The numerous public hearings held by the legislative committees gave ample opportunity for the advocates and the opponents of the bill to present their cases. The supporters of the act argued that reductions of hours had been attended by increased production, and authorities were cited to substantiate this contention. The Lonsdale Ann and Hope Mill had for several years been running three hours a week less than the majority of Rhode Island mills, without experiencing any financial loss. However, the question was not primarily one of economics but one of common humanity; life and health should be placed above property. The working people's chief need was an opportunity for self-development, and this opportunity was denied them by the long and exhausting hours of labor. It was a mistake to give great attention to production and little to consumption; the laborer should have sufficient leisure to enjoy the fruits of his labor. As a consumer, rather than as a producer, he should be of first importance. Why worry over "Freedom of Contract?" There was no such thing. The operative was establishment over ten hours a day. (Weekly Journal, March 23, 1883.) . . . The bill was again before the Legislature in 1884. It passed the House, but failed to pass the Senate on the last day of the session.

⁸⁸ See Daily Providence Journal, Jan. 14, 15, 28, Feb. 4, 12, 14, 18, 28, *et seq.*

often brought to the alternative of "work or starve," and for him the expression was an empty phrase. A law, similar to the one proposed, had given good results in Connecticut and Massachusetts; it would prove a success in Rhode Island.³⁴

In answer to these arguments, the opponents of the bill contended that such a law would be "against the established policy of the State from its foundation; the policy of allowing every adult person to govern his own conduct and make his own contracts."³⁵ Such a statute would curtail production and thereby reduce wages. Interest charges would be increased by a large amount of valuable machinery remaining idle a portion of the day, Rhode Island manufacturers would be placed at a disadvantage in competition with those of other states, especially with those of the South. If the law was to be enacted it should be a national one and be made to apply to all the states. The bill discriminated against manufacturers since it did not apply to mercantile, agricultural, and domestic labor. Mill work was not exhausting, for machinery required only periodic attention. In Massachusetts the shorter day had been met by the manufacturers' speeding up their machinery and thereby increasing the strain on the worker. It was further argued that the period of labor had been gradually reduced by natural means; if the ten-hour day was a good thing it would be adopted without legislation. The mill hands did not use their leisure for self-development; when the factories closed at an early hour they "invariably went flocking to the city."³⁶

³⁴ For these arguments see public hearings by Legislative Committees, Feb. 17, 19, March 10, 1885, as reported by *Providence Journal*.

³⁵ *Weekly Journal*, April 3, 1885.

³⁶ For the objections advanced against the bill see *Petition of*

It would be a mistake to think that the mill owners opposed the bill for selfish and callous reasons. Probably they were sincere in their conviction that such a measure would do great harm to the laboring class. There seems to be much logic in the contention of the pragmatists that our opinions are based upon our interests; that a man's ideas of what is true and worth while are relative concepts and vary with his position in society. It is interesting to note in this connection that some of the men most active in opposing the ten-hour day for women and children were among the founders of the Society for the Prevention of Cruelty to Children. They were also prominent in establishing the state home and school for dependent children, and the reform school for delinquent minors.

At the January session the bill passed the House, but was defeated in the Senate by a vote of 15 to 12. This action by the Senate created the utmost indignation among the workers, and political managers became apprehensive lest this would cause a decided shifting in party affiliations. The managers deemed it best to resist no longer the demands of the laborers. Consequently, the act which had been defeated April 7 by a vote of 15 to 12, on May 28 passed the Senate by a vote of 31 to 3. The vote in the House, the day previous had been 59 to 9. This chameleon-like change seems to have been due entirely to the political situation.

The Providence Journal in discussing the rapid passage of the bill at the May session, said it "was due to a desire to get it out of politics and quiet an agitation which

Manufacturers to State Senate, Providence Journal, Feb. 13, 1885. Public Hearings of Legislative Committees, Feb. 24, 26, as reported by Providence Journal.

might interfere with the ambitions of politicians or disturb the even course of party management."³⁷

Provisions of the Law.—This act provided that no minor under sixteen years of age, and no woman, should be employed in laboring in any manufacturing or mechanical establishment more than ten hours in any day "except to make necessary repairs to prevent the interruption of the ordinary operation of machinery, or when a different apportionment is made for the sole purpose of making a shorter day's work for one day in the week." Senator Eames was correct when he pointed out that the bill was "*a departure* from the legislation of the State as applied to *adult labor*;" that it would be but a step to apply the law to the adult man, and, in time, it would be extended to all mechanical, mercantile, and domestic work.³⁸ Every person who wilfully employed any person in violation of this act, or any parent or guardian who permitted such employment was made liable to a fine of \$20 for each offense. A certificate stating the age of a minor, made by him or by his parent or guardian, would be conclusive evidence of his age upon the trial of any person charged with the violation of the act.³⁹ (Public Laws 1885, Chapter 519.)

It will be noted that this law has several weak features. No restriction is placed upon the working of children at night, it remaining legal to employ a child ten years of age for ten hours of night work.⁴⁰ The provision is made that the employer must "wilfully" violate the

³⁷ May 29, 1885.

³⁸ Providence Journal, April 8, 1885.

³⁹ Mr. Bosworth, of Warren, wished the word "conclusive" stricken out before the word "evidence." The Supreme Court, he said, had ruled that the Legislature had no power to establish any evidence as conclusive. His suggestion was not adopted.—Providence Journal, May 28, 1885.

⁴⁰ It will be remembered that the age limit was reduced to ten

law before becoming liable to its penalty. Then, the clause permitting more than ten hours' work in order to secure a shorter day for one day in the week, made it possible for such employers as were violating the law to explain the long hours in their establishment with the statement that such was done in order to give a half-holiday on Saturday. Also, an unusual provision was that allowing a minor to give a certificate as to his age; children under sixteen are not generally allowed to sign certificates to be used as conclusive evidence.

Administration of the Ten-Hour Law, 1885-1902.—

For fourteen years after the passage of the ten-hour law, no provision was made for its enforcement. In 1899, the factory inspectors were made responsible for the administration of this statute. (Laws of 1899, Chapter 708.) If the employers reduced the week's work to sixty hours a week, it was because such action was found to be a good business policy, and not because of legal coercion exercised by government officials. This seems to be as true of the period after 1899 as it was prior to that date. Though the tendency was towards a reduction of hours, there is evidence that the law was not strictly obeyed. This evidence is from mill workers and labor leaders, and may be objected to as such, but it can scarcely be entirely fallacious.⁴¹

years by the truant law of 1883, and not until 1894 was it again placed at twelve years.

⁴¹ Returns of Employees to Commissioner of Industrial Statistics, 1887: Weaver, Warwick.—More rigid enforcement of the ten-hour law is needed, p. 39. . . . Warp Twister, Pawtucket.—"The ten-hour law is evaded by many," p. 45. . . . Loom Fixer.—"Operatives, as a class, are all worn out, and become old soon on account of long hours and close, filthy air."

Returns of Employees, 1889: Can-Room Employee.—"Small help are employed ranging from 7 to 15 years; they are often obliged to work overtime until 10 p. m.," p. 154. . . . Hooker.—"We have to

There were many influences working for the observance of the law; the mill managers had no fear of being prosecuted by the inspectors, but the simple fact that the law was on the statute books caused many employers to comply with its provisions. The mill owners also realized that their property rights are based on law, and it is incumbent upon them not to encourage, by their example, the spirit of lawlessness. Again, it is difficult to force the workers to labor overtime, unless it is understood that such is to meet an emergency. Knowing the existence of the law, they will strike to secure a shorter day, and under such circumstances, the employers can seldom hope to be successful in the contest. Perhaps the strongest reason for the observance of the statute is the fact that the mill managers have found that a reduction of the average working day to ten hours has not curtailed production. Such influences, rather than any activity on the part of the factory inspectors, caused the manufacturers, during normal periods of business, to comply with the law.

work until 9 and 10 p. m. when there are many orders," p. 155. . . . Knotter.—"The ten-hour law is openly violated, girls working in some instances 66 hours a week," p. 155. . . . Drawer-In.—"The laws regulating the time of working are constantly violated," p. 152. . . . Weaver.—"Those having authority would do well to investigate the way the ten-hour law is being trifled with," p. 154.

The members of the Textile Union of Providence held a meeting Jan. 8, 1902, to protest against the employment of children and women until 9 p. m. and later. A committee placed before Governor Kimball charges against eight of the largest mills in Providence.

At public hearing of the House Committee on special legislation, Feb. 26, 1902, Joseph Bickwell said that some time previous to that date, the laws had been broken by the mills running 15 or 16 hours a day. He asserted that every mill in the State required its hands to work 61 and 62 hours a week. Thomas McHugh stated that in Pawtucket boys 12, to 15 years of age worked in the mills until 9 and 10 p. m. James Cliffe mentioned a mill which required women and children to work until 9 o'clock at night.—See *Providence Journal*, Feb. 27, 1902.

The reports of the United States Bureau of Labor show that during 1885-86 the working hours in Rhode Island factories were, in general, sixty hours a week, and in many cases the hours were less than that number. For 1895-96, the reports indicate that the number of factories working *less* than sixty hours was greater than at the beginning of the decade.⁴²

The returns of 1439 working women to the Commissioner of Industrial Statistics in 1889, showed that 90 per cent. of these women worked ten hours a day; over 98 per cent. worked ten hours or less; and less than 2 per cent. worked over ten hours.⁴³

Week's Work Reduced to Fifty-Eight Hours.—The workers were dissatisfied with the sixty-hour law, because

⁴² Compiled from Statistics of Eleventh Report United States Commissioner of Labor, pp. 635 and 639-645.

Office No.	Manufactures	Hours of Labor	
		1885-86	1895-96
61	Awnings	60	60
207	Brooms	60	60
469	Cotton goods	60	60
470	" "	60	60
471	" "	66	60
515	Drugs, paints, etc.....	60	60
736	Paper goods	60	60
738	" "	58	58
748	Print-works	60	60
814	Printing, blank books.....	60	59
815	" " "	59	59
816	" " "	58 (clerks)	56
828	Harness, belting	60	60
832	Rubber goods	60	59
873	Screws, games, novelties.....	48 (packers)	55

⁴³ The 1439 women worked as follows:

Less than eight hours.....	7
Eight to ten hours.....	111
Ten hours	1,298
Over ten hours.....	23

Compiled from Report of Rhode Island Commissioner of Industrial Statistics, 1889, pp. 26-136.

in order to secure a half-holiday on Saturday, it was necessary to shorten the period allowed for the noon meal. The labor unions determined to secure the amendment and instituted a systematic propaganda for this purpose. The arguments advanced were very similar to those presented in favor of the 1885 law.⁴⁴ In 1902, political conditions were such that it was necessary to placate the labor vote, and consequently, the bill passed on April 4, without a dissenting voice. (Laws of 1902, Chapter 994). The act amended Chapter 519 of 1885, by reducing the week's work to fifty-eight hours, no other change being made in the law.

Night Work Prohibited for Children.—By the child labor law of 1905 (Chapter 1215) it was decreed that no child under sixteen should be employed in any factory, manufacturing or business establishment before 6 A. M. or after 8 P. M. An exception was made so that this restriction should not apply to mercantile establishments on Saturdays, or on either of the four days immediately preceding Christmas. The circumstances attending the passage of this act, have already been discussed.⁴⁵

Present Administration of the Law.—What has been said of the enforcement of the law during the period 1885-1902, applies in large degree to its present administration. Speaking generally, the statute is well observed during periods of normal business activity. There are exceptions, but these are not sufficient to vitiate the conclusion as stated. This is true of normal periods but does not apply when the manufacturers are rushed by sudden and urgent orders. The writer has been informed from various sources that during these rush periods, the mills and shops run over time. That there is occasion

⁴⁴ See public hearing on the bill, Feb. 26, 1902.—Providence Journal, Feb. 27, 1902.

⁴⁵ See Chap. II, Law of 1905.

for this overtime work is readily granted by the employer. Back in 1885, the minority report of the Senate Judiciary Committee presenting the arguments of the manufacturers said: "The peculiar nature of all manufacture, but more peculiarly of those employments ["woolen and worsted mills, all yarn mills, and all bleaching and dyeing establishments"] renders it necessary to work overtime to fill sudden orders. The help understand this and are satisfied with it, as they are paid extra for the overtime work."⁴⁶

This inducement to run overtime is as strong at the present day as it was in 1885. It is to the great advantage of the employers to meet these emergencies by running extra hours. The workers are paid one and one-third to one and one-half times the usual wage, and as a rule, do not object to the arrangement when they understand that it is of a temporary nature. At such times an additional force for a night shift could not be secured on short notice without disproportionate expense, nor would such a force be trained for the work required. Should the increased demand become steady and permanent, the manufacturer would then be warranted in hiring and training an extra night force, or in extending his plant so as to employ additional day workers. The violation of the law is to meet a sudden, and what appears to be a temporary demand for certain styles of goods. The manufacturers reason that other employers are allowed to work their laborers over-time to meet emergencies; and give as examples: store employees during holidays and on Saturdays; railroad men at periods of heavy travel or traffic; the United States post-office employees during the Christmas season. The manufacturers ask why they should not be granted the same opportunity to meet sudden demands.

⁴⁶Weekly Journal, April 3, 1885.

CHAPTER IV.

FACTORY ACTS.

The Rhode Island factory inspection law dates from 1894 and was the result of a persistent demand by the workers during the previous decade. Unlike the inspection law of other states, the Rhode Island statute is not a product of gradual growth, a summation of laws passed from time to time; but was, for the most part, contained in the act of 1894 and remains practically unchanged at the present day.

Early Conditions—Complaints against factory conditions go back to the early days of Rhode Island manufactories. These complaints were, however, directed chiefly against child labor, little attention being given to sanitation, the guarding of machinery and other matters which enter into the present factory laws. The Rhode Island factories before 1840—in fact, the period may be extended to 1860—were, in general, not large, so that the evils against which recent legislation has been directed were not then acute.¹ There is no doubt that objectionable features were present, but as industry was not concentrated and the rigid discipline of the present day was not necessary, these evils of sanitation and dangers to life and limb did not reach excessive proportions.² This must be borne in mind when reading Seth Luther's arraignment of New England factories in 1833,³ or the charges made by the New England Association of Far-

¹ Jones: Transition of Providence from a Commercial to a Manufacturing Community, p. 118.

² Grieve: History of Pawtucket, p. 96.

³ Address to the Workingmen of New England.

mers, Mechanics and other Workingmen, at their convention in 1832.⁴

Even had factory conditions been such as depicted by Luther's vehement eloquence, factory inspection law could not have been enacted during these early days. Governmental control was regarded with suspicion: each man considered he had an inalienable right to conduct his business as he saw fit. Individualism was a real and active principle with these men. This was one reason why no adequate provision was made for the enforcement of laws pertaining to child labor and to hours of work. Nor can it be said that the average workman made an imperative demand for State inspection of factories. The workman did not expect to remain a member of a class requiring special protection: he had high hopes of becoming himself an employer and capitalist.

There was some mention of factory inspection in 1853, the year during which there was considerable activity in labor legislation. On February 24th of that year, the minority of the House Judiciary Committee in reporting on the child labor bill said: "Other provisions in the English acts providing penalties and security of operatives from danger by the fencing of machinery, we do not stop to consider. Important as is some action in regard to the personal security of children working in the midst of ponderous machinery, we deem it inexpedient to recommend such action now."⁵ It has also been seen that Colonel Welcome Sayles, who was chosen by the General Assembly to make an investigation of factory conditions, in 1853 recommended that a State Commissioner of Mill Help be appointed to inspect the factories and make re-

⁴ Proceedings reprinted in the handbook of the Rhode Island division of the American Federation of Labor, 1894.

⁵ Providence Post, Feb. 25, 1853.

ports to the Legislature.⁶ No serious attention was given to this suggestion.

THE FACTORY INSPECTION ACT OF 1894.

Introductory.—By the year 1850, the manufacturing interests of Rhode Island had become predominant over all other industries of the State. After the close of the Civil War this disproportionate power of the manufacturers became even more manifest. The mill owners were thus able to resist successfully any proposed legislation which they considered detrimental to their interests. It has already been pointed out that after 1840, the mill help came to be, in large part, composed of immigrants, first the Irish, and then the French Canadians, who did not have high standards of living, and did not, therefore, demand improved conditions of work. This probably retarded a concerted movement for a factory inspection law.

A definite demand for a State inspection law was first made by the Knights of Labor in the early eighties. That organization in its declaration of principles in 1878 had declared for "the adoption of measures providing for the health and safety of those engaged in mining, manufacturing and building industries." The Knights rapidly increased their membership in Rhode Island and in 1885, as we have seen, forced the passage of the ten-hour law. At the time this bill was before the Legislature, the labor leaders announced that a factory inspection act would next be presented to the law-makers. In 1887, instead of a factory inspection department, the Bureau of Industrial Statistics was created. It was then thought that the bureau would supply the desired information as to labor conditions, but as the officials of this bureau were not given police powers, they could not enter the fac-

⁶ See Report in Acts and Resolves, 1853.

tories except with the consent of the owners. For the six years after 1887, the manufacturers were successful in preventing the passage of an inspection law.

From the number and character of the complaints made against the manufacturing establishments during the decade prior to 1894, it is fair to conclude that a real need for a factory inspection law existed. It is probable, however, that the more extreme charges were, for the most part, directed against the old mills and were not applicable to general conditions. As the scope of manufacturing widened, and the accumulations of capital increased, the older factories have, in many instances, given place to those of a higher type in which the laborer's surroundings were improved. It may be that some of the complaints were exaggerated; advocates of any cause are sometimes given to making over-statements. But, after every allowance is made for exaggeration, it still remains true that the workers had ample cause for demanding an inspection law.

Factory Conditions.—Many of the petitions in 1885 for the ten-hour law seized the opportunity to condemn the sanitary conditions of the mills. General Horatio Rodgers, at a hearing of the Senate Judiciary Committee, said he “was not a little shocked” to hear the mills described as “pest houses” and as “reeking with ‘pestiferous’ vapors from oil evaporating on machinery.” Such descriptions, the speaker claimed, were at utter variance with facts. Before the same committee, labor leaders charged that the work rooms were filled with steam vapor to increase the dampness, the yarn running better with damp air; and that in some instances the temperature was maintained at from 100 to 120 degrees.⁷ The mill workers

⁷ See testimony before Senate Judiciary Committee, *Weekly Journal*, March 13, 1885.

in their returns to the Commissioner of Industrial Statistics for 1887 and 1889, complained of close air, defective sanitation, and of being compelled to work under sprinklers.⁸ The commissioner in his report for 1889 said that "while many of the workshops" possessed "all the requisites for health and comfort" there were "some lacking in every particular." He was of the opinion that these latter conditions were exceptional.⁹

The returns from working women to the Bureau of Industrial Statistics in 1889, and the investigation conducted by that bureau in 1893, go to show that state supervision was needed. Although factory conditions were not as distressing as alarmists believed, they might well have been better.¹⁰

⁸ Loom-Fixer, Providence.—"Operatives as a class are all worn out and soon become old on account of long hours and close, filthy air."—Report Commissioner Industrial Statistics, 1887, p. 40. . . . Warp Twister, Pawtucket.—"Sanitary conditions is bad."—*Ibid.* . . . Weaver, Pawtucket.—"Sanitary conditions of workshops in many cases are wretched, and in some cases abominable."—*Ibid.*, p. 46. . . . Jeweler, Providence.—"Jewelry shops seldom possess means of ventilation."—*Ibid.* . . . Drawer-In.—"The room I work in is over a swampy place and in the Spring the water bubbles through the floor. We work under sprinklers and our clothes are wet all the time."—Report Commissioner Industrial Statistics, 1889, p. 152. . . . Drawer-In.—"Women are compelled to stand continually in these departments in an atmosphere densely charged with vapors poisonous to the system."—*Ibid.*, p. 152. See also p. 154. . . . Girl-Box Tender.—"I work in a room where the sprinklers are fastened to the ceiling; our clothing is wet all the time."—*Ibid.* . . . Tailoress.—"Everybody in the building where I am employed use the same water closet. There are a large clothing store, three tailor shops, a barber shop, two broker's offices, one piano room, one shoemaker's shop, and a repair shop."—*Ibid.*, p. 151.

⁹ Report 1889, pp. 16 and 17.

¹⁰ The statistics for 1889 are based on returns of working women, the results being compiled from the unsummarized figures of the report. *The numbers refer to the answers of individual women.* (Bureau of Industrial Statistics, 1889, pp. 26-137.) The statistics for

The report of the United States Bureau of Labor for 1888 says of the mills in Providence:¹¹ "The older mills are defective in light, ventilation and space, are often without dressing rooms, and frequently the ordinary sanitary requirements are disregarded. These conditions with the floating dust incident to work in the mills, and the rigor of the climate in the winter season, induce diseases of the lungs. The extensive jewelry manufactories are usually well suited for their uses, but parts of the work are said to be injurious." According to the statistics of this report, the health of the working women of Providence was very similar to that of working women for the entire nation.¹² It is seen that after beginning employment there was an appreciable decline in the health of the workers. In the case of the Providence women,

1893 were obtained by the officials of the bureau, and refer to individual factories. (Report of 1893, p. 57.)

	Women Reply- ing	1889		Number Estab- lish- ments	1893	
		Yes	No		Yes	No
Foul odors in workroom...	832	193	639	232	87	145
Separate water closets....	1,439	1,324	115	232	200	32
Rooms for changing dress.	1,321	440	881	232	57	175

¹¹ Page 23.

¹² Report United States Commissioner of Labor, 1888, pp. 65 and 383.

WORKING WOMEN OF PROVIDENCE.

	Good	Health Fair	Bad
At age of beginning work....	568	34	8
Per cent.	92.6	5.6	1.3
At present time (1888).....	494	91	25
Per cent.	81.0	14.9	4.0

WORKING WOMEN OF UNITED STATES.

At age of beginning work....	16,360	882	185
Per cent.	93.9	5.0	1.0
At present time (1888).....	14,557	2,385	485
Per cent.	83.5	13.6	2.8

it is improbable that this decline in health was caused by advancing age, for of the 610 women the average age was twenty-four years, four months, and only 38 were over thirty-eight years of age. Whether or not this failing health was due to causes independent of their work cannot be ascertained.

Mr. Capron, when opposing in 1890 the proposed factory act, which was practically a copy of the Massachusetts statute, said that under such a law, "the factory inspector would find a hundred things in some of the old mills of Rhode Island that he would order changed. It is doubtful," said he, "if there is a single mill in the State that could present a clean bill of health."¹³

Legislative History of the Act.—Petitions from the workers for an inspection law were presented to the General Assembly in 1888. The petitioners afterwards complained bitterly that their prayers were disregarded.¹⁴ In his report for 1888 the commissioner of industrial statistics pointed out that the law by which the bureau was established, made him a factory inspector but gave him "no authority whatever," and he recommended that Rhode Island should follow the example of other states in providing for regular inspectors of factories.¹⁵ The bill was introduced at the January session, 1890, and for the three subsequent years was urged by the labor interests.¹⁶ The act met with the organized opposition of

¹³ Proceedings of House of Representatives, Providence Journal, March 27, 1890.

¹⁴ Report Commissioner Industrial Statistics, 1889, pp. 150, 152, 153.

¹⁵ Report, 1888, p. 140.

¹⁶ An act based upon the Massachusetts statute passed the House, March 27, 1890. (Providence Journal, March 28.) In the debates over the bill, it was claimed that too much arbitrary power was given to the inspector, and it was suggested that the town councils be courts of appeals. Mr. Cook, of Providence, thought the bill offered much opportunity for collusion between the inspector and

the manufacturers and was repeatedly defeated. In 1894 the opponents of the measure seem to have decided that the persistent demands of the workers could no longer be repulsed. It is probable that the political situation aided them in reaching this decision. The Women's Council, composed of civic and philanthropic societies of Providence, gave most efficient support to the movement. A final vote on the bill was taken on March 1, and as the Providence Journal said, "contrary to the expectation of everyone" was passed unanimously. This vote was afterward rescinded and another bill of the same nature, but more explicit in its phrasing, was passed by both Houses on April 26.

Provisions of the Act.—This act (Chapter 1278) was modeled along the lines of the Massachusetts law. The following is a digest of its chief provisions:

Sec. 1. *Child Labor.* No child under twelve years shall be employed in a manufacturing or mercantile establishment.

Sec. 2. *Factory Defined.* This chapter shall apply to establishments employing five or more persons.

Secs. 3 and 4. *Inspectors.* The Governor shall appoint two factory inspectors, one of them a woman, for a term of three years. The inspectors shall as often as is practicable inspect all establishments employing women or children and prosecute all violations of this Chapter. They shall make an annual report to the General Assembly. The salary of each inspec-

rich manufacturers. Mr. Wilson said the proper enforcement of the act would require an angel, but he knew the inspector would be a mere man. (Providence Journal, March 27.)

Mr. Thornley, in a debate at the June session, said such a law would drive the manufacturers out of the State. "When a man has got together a few thousand dollars and put it in bricks and mortar, he is not going to allow the Senate, with a few cranks in it, to manage the business for him." (Providence Journal, June 20, 1890.)

tor shall be \$1,500 a year, and office expenses to the amount of \$1,200 shall be paid by the State.

Sec. 5. *Elevators.* The owner or lessee of any factory or mercantile establishment, when so directed by the factory inspector, shall enclose hoisting shafts and well-holes, and shall provide trap or automatic doors, so fastened in elevator ways as to form substantial surfaces, and so constructed as to open and close by action of the elevator in its passage.

Sec. 6. *Cleaning of Machinery.*—No minor under sixteen years shall clean machinery while it is in motion unless such action is approved by the inspectors as not dangerous.

Sec. 7. *Reporting of Accidents.*—Employers shall report in writing to the inspectors all fatal accidents within 48 hours after their occurrence; and all accidents, which prevent the injured person from returning to work within two weeks, shall be reported within three weeks after occurrence.

Sec. 8. *Closets.*—Shall be provided in all places where women and children are employed, in such manner as shall, in the judgment of the inspectors, meet the demands of health and propriety.

Dressing Rooms.—Separate dressing rooms for women and girls shall be provided where such are deemed a necessity by the inspectors.

Seats for Women and Girls.—Shall be provided and they shall be permitted to use them when their duties do not require their standing.

Sec. 9. *Defective Conditions.*—If the inspectors find that the heating, lighting, ventilation, or sanitary arrangement of any shop or factory is such as to be injurious to the health of the persons employed therein, or that the means of egress in case of fire or other disaster is not sufficient, or in accordance with all the require-

ments of law, or that the belting, shafting, gearing, elevators, drums, and machinery in shops and factories are located so as to be dangerous to employees, and not sufficiently guarded, or that the vats, pans, or structures filled with molten metal or hot liquid are not surrounded with proper safeguards for preventing accident, or injury to those employed at or near them, either or both shall notify the proprietor of such factory or workshop to make the alterations or additions necessary within ninety days.

Sec. 10. *Appeal from Inspectors' Orders.*—Any person aggrieved by an order of the inspectors may appeal to the district court for revocation of the order.

Sec. 11. *Power of Inspectors.*—Inspectors shall have power to administer oaths or affirmations.

Sec. 12. *Penalty.*—Any person who knowingly violates any of the provisions of this act shall upon conviction be fined not more than \$500.

Sec. 13. *Posting of the Law.*—A printed copy of the law shall be posted by the inspectors in each establishment affected by its provisions.

Factory Inspectors.—It is seen that the effectiveness of the above statute depends upon the inspectors' standards of "health and propriety," and what he considers essential to the protection of life and limb. With the exception of the provisions regarding the construction of elevators, and those fixing the age of child labor, no definite requirements are made for physical and moral surroundings of the operatives. The character of the law depends almost entirely upon the interpretation given it by the inspector. The advantages and disadvantages of this indefinite statute will be discussed in another section.

Inspectors to Enforce the Hours-Of-Labor-Laws.—By an act of 1899 (Chapter 708) the factory inspectors were required in addition to their other duties to enforce the law limiting the hours of work for women and children to sixty hours a week. (Chapter 519 of 1885). The law of 1902 (994) reduced the week's work to fifty-eight hours, and in 1905 (Chapter 1215) the employment of children before 6 A. M. or after 8 P. M. was prohibited.

State Senate to Elect Inspectors.—An act of 1901 (Chapter 809, Sec. 12) amended section 3 of the law of 1894 by providing that the Governor must have the advice and consent of the Senate in the appointment of factory inspectors. This requirement was equivalent to taking the appointing power from the Governor and vesting it in the Senate; for the statute provides that, if within a specified time, the Governor does not present such a nominee as will be acceptable to the Senate that body shall proceed to elect a man of its own choice. This unique statute is one of the most efficient instruments for party control ever devised. By this law the factory inspectors are made responsible to the Senate alone, which, owing to a peculiar system of unequal representation, has long been controlled by one party. It is doubtful if these circumstances are conducive to a rigid enforcement of the factory laws. The writer does not purpose to add to the already voluminous comment on Rhode Island political conditions except in so far as these conditions may affect the administration of labor legislation.

The Law of 1905.—The changes made in the factory inspection law by the act of 1905 (Chapter 1215) dealt chiefly with child labor. These have already been considered. By the act of 1894 the inspectors had been empowered to visit and inspect "the factories, workshops,

and other establishments in the State employing women and children." A strict interpretation of this clause would have prevented the inspection of establishments where only men were employed. The act of 1905 authorized the inspectors to inspect "the factories, workshops and other establishments in this State subject to the provisions of this Chapter." The force of factory inspectors was increased by the provision for one chief inspector at \$2,000 a year, and two assistant inspectors at salaries of \$1,500. One of the assistant inspectors must be a woman. Before this act, the inspection force had consisted of two officials of equal rank. The greater part of the 1894 statute was not changed and is the law of today.

Toilet Rooms in Foundries.—In 1904, a law (Chapter 1142) was enacted that every foundry employing ten or more men should provide suitable toilet rooms containing wash-bowls or sinks, supplied with water, water closets, and a room wherein the men may change their clothes, this room to be within the building occupied by the foundry. The penalty for violation of this law is a fine of not less than \$50 or more than \$100. The bill was passed owing to the urgent solicitations of the Moulders' Unions. H. E. Bryant, New England representative of the Iron Moulders' Union, supported the measure at public hearings of the legislative committee.

Drinking Water For Factories.—By an act of 1907, (Chapter 1429) factories and workshops are required to supply fresh drinking water of good quality to their employees. The boards of health of towns and cities are authorized to enforce the law. The bill was introduced by Representative Kearney and met with little opposition. It seems to be well observed by the manufacturers.

ADMINISTRATION OF THE FACTORY INSPECTION LAW.

Introductory.—It is seen that the Rhode Island factory inspection act makes very few definite provisions to which the mills and shops are required to conform. The law orders that the conditions regarding lighting, heating, ventilation, toilet facilities, dressing-room, and guarding of machinery shall be such as are deemed necessary by the inspector. The effectiveness of the measure depends, therefore, upon the inspector's standards of health and safety.

This indefiniteness of the law is an advantage in that it allows the inspector to adjust his orders to the needs of the occasion. Conditions vary with the different mills, so that it may be best to leave to the judgment of the inspector what changes are required. A manufacturer would regard as a great hardship an order requiring him suddenly to bring an old mill up to a fixed standard, whereas, an official possessing tact and firmness, could cause the employer gradually to improve the conditions of his establishment. Perhaps, it may be well for the inspector to give his orders as though suggesting improvements rather than as enforcing a legal requirement.

On the other hand, this Rhode Island statute has the very evident weakness of making too much depend upon the character of the inspector. Where there are no definite standards to be maintained there is danger of the inspectors', through indolence or cupidity, lapsing into a condition of innocuous inactivity. Again, where there are no definite statutory requirements, the workers have nothing to guide them in making complaints concerning unsatisfactory surroundings. The writer is of the opinion that the statute would be improved by incorporating certain minimum standards of health and safety to which the factories should be compelled to conform.

Lighting.—If the factory inspectors . . . find that the lighting . . . is such as to be injurious to the health of the persons employed . . . either or both shall notify the proprietor of such factory or workshop to make the alterations or additions necessary within ninety days.

No general term would accurately describe the conditions of lighting in the Rhode Island factories, for these conditions vary with the age of the mills and with the different departments in the same mill. The writer is of the opinion that, as a rule, the lighting of the mills and workshops is good. This is not in agreement with Mr. Shadwell's opinion.¹⁷ There are, of course, some factories in which conditions are distinctly bad, but these cannot be taken as typical. In the majority of factories, the greater part of the wall space is occupied by windows, and the workrooms, especially the weaving, spinning, and burler rooms, have abundant light. Most of the rooms given to the sewing and inspecting of cloth, are provided with skylights.

As has been said, the lighting in some of the establishments is defective. This is particularly true of the old mills. The braiding-room of a shoe-string factory, in which the writer worked, was so gloomy as to make the task of threading the braiders a severe strain on the eyes. In another mill, the "crabber" room was ill-lighted, though other departments were satisfactory. Many of the dyeing and "wetting" rooms of the older mills are gloomy; some of them are dark. It is an encouraging fact that the establishments recently constructed are well-

¹⁷ . . . "that cannot be said of the United States where I have seen many modern mills miserably lighted. Weaving sheds placed beneath other rooms are common, and, indeed, the rule. . . . A bad light is the most conspicuous and general defect of American factory premises."—Shadwell: *Industrial Efficiency*, Vol. II, p. 53.

lighted, and the old dye rooms are in many cases being replaced by more cheerful quarters.

Heating.—If the factory inspectors . . . find that the heating . . . is such as to be injurious to the health of the persons employed, . . . either or both shall notify the proprietor . . . to make the necessary alterations or additions within ninety days.

The writer's visits to the Rhode Island mills were limited to the summer months, and he is, therefore, not personally familiar with conditions during cold weather. A few workmen complained that in winter the workrooms were cold, but the majority of the men questioned said that the heating was satisfactory. The writer found the temperature in most of the workrooms during the summer to be fairly comfortable. Naturally, this statement does not apply to all the rooms. In the departments where the cloth or yarn is "dressed" the heat is excessive, often being as high as 120 degrees. With the present processes of "dressing," this high temperature cannot be avoided. The dye houses are generally highly heated and often filled with steam. There seems to be no necessity for such conditions as the departments could be so constructed as to eliminate from the air the greater part of the steam and acid fumes. The inspectors might well be more critical in their examination of dye houses. The workers in these rooms accept such surroundings as a matter of course; they say it is "all in the game," and make no complaint.

Ventilation.—If the factory inspectors . . . find the ventilation . . . is such as to be injurious to the health of the persons employed . . . either or both shall notify the proprietor . . . to make the necessary alterations or additions within ninety days.

In summer, the ventilation of Rhode Island factories is satisfactory; in winter, it is very defective. This corresponds closely to the conditions prevailing in the homes of the workers. The importance of fresh air is not appreciated by the average man, and, as a result, during the late autumn and the winter the hundreds of windows of factories are kept tightly closed. It is probable that mill managers would not object to the rooms' being better ventilated, but there is no demand by the workers that the windows be opened. Yet, even with these failings, it is probable that the air in the factories is better than that of other buildings frequented by the workers. Mr. Shadwell, who visited a number of the Rhode Island mills, is of this opinion when speaking of general conditions in America.¹⁸ The air in the manufacturing establishments is not good, but it is better than that which the worker breathes elsewhere. It is true, two wrongs do not make a right; the lack of ventilation in the homes of the laborers does not excuse the faulty conditions in the factories. What is needed is that the workers should be educated to appreciate the hygienic importance of fresh air.

Seats for Women and Girls.—In every manufacturing, mechanical, or mercantile establishment in which women and girls are employed there shall be provided conveniently located seats for such women and girls, and they shall be permitted to use them when their duties do not require their standing.

¹⁸ The atmosphere now maintained in most factories is better than that breathed in any other buildings frequented by the work people. It is better than that in schools, churches, chapels, public houses, theatres, and far better than that in the homes of the workers. This was borne out by investigations of the Department Committee appointed by the British Home Office, to investigate the ventilation of factories.—Shadwell: *Industrial Efficiency*, Vol. II, p. 48.

Compliance with this law seems to be satisfactory.

Dressing Rooms.—Separate dressing rooms for women and children shall be provided in all establishments where such are deemed a necessity by said factory inspectors.

The inspectors say frankly that they do not think dressing rooms are needed in factories. Certainly, in very few establishments are such facilities provided. The writer is inclined to think that there is no demand by the workers for these rooms, and that if such conveniences were provided they would, in most instances, not be used by the employes. In most of the mills each workroom is equipped with a metallic sink, similar to those used in kitchens, and at these the workers bathe their faces and hands. This is not a very elegant arrangement, but it is that to which they are accustomed at home, and it seems to answer the purpose fairly well. The women and girls have working skirts and jackets which they slip over their street dresses and they manage to keep themselves surprisingly neat.

Water-Closets.—Water-Closets . . . shall be provided in all places where women and children are employed, in such manner as shall in the judgment of said inspectors meet the demands of health and propriety.

The inspectors' standards, as to what toilet facilities meet the demands of propriety, are not high. Separate water-closets, as a general rule, are provided for the sexes, but in many instances these closets are adjoining and are not equipped with separate and screened approaches. The entrances are often in full view of workers of both sexes. The inspectors repeatedly told the writer that such closets are satisfactory and that the

factory employes do not object to such arrangements. Certain it is that the workers do not regard such toilet facilities as an evil and there is little demand for improvement. The indifference of both sexes to privacy in this matter would be a revelation to one who is not accustomed to factory conditions. It appears that such conditions have dulled the delicacy of the female employes; whether or not this has led to increased immorality is a question which cannot be accurately answered. The statements as to the morals of mill workers are so varying as to neutralize each other and are practically worthless. Toilet facilities in the tenement homes and lodging houses are much worse than those in the factories and train the laborer to accept the mill conditions without comment.

Cleaning of Machinery.—No minor under sixteen shall be allowed to clean machinery while it is in motion unless the same is necessary and approved by said inspectors as not dangerous.

This law seems to be well observed in the Rhode Island factories.

Guarding of Machinery.—If the factory inspectors find . . . that the belting, shafting, gearing, elevators, drums, and machinery in shops and factories are located so as to be dangerous to employees, and not sufficiently guarded, or that the vats, pans or structures filled with molten metal or hot liquid are not surrounded with proper safeguards . . . either or both [of the inspectors] shall notify the proprietor . . . to make the alterations or additions necessary within ninety days.

In Rhode Island, as in other American states, little progress has been made in guarding machinery. Mr.

Shadwell says of conditions in America that "the fencing of machinery is almost ignored" and that very little attempt is made for the complete covering in and protecting of parts as may be seen in the best English factories.¹⁹ Gearing is found exposed in many of the Rhode Island factories, and the practice of enclosing dangerous belt-ing is not general. In several of the mills visited this danger was increased by the crowding of machinery. The factory inspectors have done good work in having removed projecting shafts which are especially dangerous in catching the dresses of women and girls. Through the influence of the inspectors, the managers have made rules forbidding the mill girls to wear their hair loose or in plaits. The girl with curly locks would otherwise willingly run the risk of being scalped by the machinery.

It is encouraging to note that many of the new mills are equipped with better guarded machinery and that more space is allowed for the workers. The best guarded machinery seems to be that imported from England. It is a good business policy for the owners thus to equip their new establishments, for it is almost certain that stricter factory laws and more careful enforcement will before many years be demanded and obtained by the labor forces.

There is thus ample opportunity for the better protection of machinery in most of the Rhode Island factories, and the present inspectors might well insist upon higher standards in this regard. The writer is, however, of the opinion that labor leaders over-estimate the good results which will come from the installation of safety devices. A limit to the guarding of machinery is soon reached: even with the best means of protection, the machine often remains dangerous and many accidents will

¹⁹ Shadwell: *Industrial Efficiency*, Vol. II, p. 54.

occur. This is one of the penalties which society pays for rapid, mechanical production. The guarding of machinery to be effective must be supplemented by the excluding of all laborers who have not reached the age of discretion and resourcefulness; by shorter hours so that the workers can remain alert and careful; by good sanitary conditions so that the tenders of machinery may have the quickness of eye and steadiness of hand born of good health.

Reporting of Accidents.—It shall be the duty of the owners or superintendent to report in writing to the factory inspectors all fatal accidents within forty-eight hours after their occurrence; and all accidents which prevent the injured person from returning to work within two weeks after such injury shall, within one week after the expiration of such two weeks, be reported . . . to said inspectors.

This section of the law is not enforced. The inspectors freely admit that they depend upon the public press for knowledge of such accidents as are listed in their annual reports. The writer would question the usefulness of such a law even if it were well administered. But, this is beside the point. The law, being upon the statute book, should either be enforced or repealed.

Factory Inspectors' Report.—Said inspectors . . . shall report to the General Assembly . . . each year, including in said reports the names of the factories, the number of hands employed, and the number of hours of work performed each week.

Below is given a page taken from the report of factory inspection for the year 1906.

Establishment	Character of Business	Men	Women	Children under sixteen		Sanitary Condition	Orders	Compliance
				Boys	Girls			
Union Winding Co.....	.....	6	14	...	...	Fair.	.....	.....
U. S. Finishing Co., Silver Spring...	Finishing cotton goods.	598	70	15	2	Very good.	Send out boy for certificate.	Complied.
U. S. Gutta Percha Paint Co.....	.....	21	5	...	...	Good.	.....	.....
United Wire & Supply Co.....	.....	78	6	2	...	Excellent.	.....	.....
Universal Die Sinking Co.....	Die cutters	8	...	...	...	Good.	.....	.....
Universal Winding Co.....	Winding machines	187	4	2	...	Excellent.	.....	.....
Usona Cafe.—Closed .....	.....	...	...	...	...	.....	.....	.....
Van Tyn Bros.....	Beef and provisions.....	6	...	...	...	Good.	.....	.....
Vaughn, L. Co.....	Sash, doors, blinds, etc.	45	3	...	...	Good.	.....	.....
Vennerbeck & Clase Co.....	Gold and silver plate...	12	...	...	...	Good.	.....	.....
Vermont Mfg. Co.....	Oleomargarine	14	1	...	...	Very good.	.....	.....
Vesta Knitting Mills.....	Underwear	50	175	20	10	Very good.	.....	.....
Vester, Alfred & Sons.....	Metal ornaments	22	2	6	...	Good.	.....	.....
Viall, Geo. R.....	Beef	10	...	...	...	Very good.	.....	.....
Viall Market, The.....	.....	4	1	...	...	Good.	.....	.....
Voelker, Philip L.....	Brushes	5	27	...	...	Excellent.	.....	.....
Vose, Geo. L. Mfg. Co.....	Jewelry	26	10	1	...	Good.	.....	.....
Wachenheimer Bros.....	Jewelry	23	2	1	...	Good.	.....	.....
Wadsworth Braiding Co., removed to Mansfield .....	.....	...	...	...	...	.....	.....	.....
Waite, Mathewson & Co.....	Jewelry	38	25	2	...	Excellent.	.....	.....
Waite-Thresher Co.....	Jewelry	132	52	1	1	Excellent.	.....	.....
Waldorf Lunch .....	.....	12	...	...	...	Good.	.....	.....
Wall, A. T. Co.....	Plate and seamless wire	82	12	...	1	Excellent.	.....	.....
Walsham, Josiah	Brass ornaments	10	1	...	...	Good.	.....	.....
Wanskuck Mills	Worsteds	531	387	32	37	Very good.	.....	.....

It is seen that the report fulfills the requirements of the law by giving the names of the factories and the number of hands employed. The statute also orders that the report shall give the number of hours of work performed each week. It is well that this provision is disregarded, for the printing of long columns of 58's is thus avoided. The reports are not satisfactory guides as to the sanitary conditions of the mills. In very few instances can the sanitary condition of an entire mill be classed under one of the categories of "excellent," "good," et cetera. A mill may have excellent lighting, but have bad closets; it may have satisfactory ventilation and yet be defective in cleanliness. It would be misleading to class such an establishment as "excellent" or as "bad." What is needed is that there be a separate column for each aspect of sanitation; lighting, heating, ventilation, closets, et cetera. It might be advisable to have a report on each of the chief departments of an establishment. For instance, in the case of a textile mill, reports on lighting, ventilation, et cetera, could be made for the spinning, weaving, dyeing and finishing departments. The arrangement of the establishments engaged in the same industry is sufficiently similar to make such a report practicable. It is true with such careful inspection, the number of factories visited would be considerably reduced; but it is better for 600 establishments to be inspected thoroughly, than for a cursory visit to be paid to three times that number. The report for 1907 states that 1,899 establishments were inspected.

The statistics referring to adults and to children under sixteen years of age are probably not of much value. They are based upon returns made by the employers and seemingly no attempt is made by the inspectors to ascertain if such returns are accurate. There is no reason

why the employer should have his workers classified according to age periods. The employer knows the total number of his employes, and in making out the report card, he probably makes a rough guess as to how many of these employes are under sixteen.

Posting of the Factory Act.—A printed copy of this chapter shall be posted by the inspectors in each workroom of every factory, manufacturing or mercantile establishment where persons are employed who are affected by this chapter.

This provision of the law has been well administered; copies of the statute were found in each of the factories visited.

CHAPTER V.

FIRE ESCAPES AND ELEVATORS.

I. Fire Escapes.

The first legislation in Rhode Island designed to protect the inmates of buildings from fire seems to date from 1859. Previous to that year there had been some legislation requiring that houses be provided with ladders and other appliances, but these regulations were intended to aid the volunteer companies in preventing conflagrations rather than for the protection of those living or employed in a building. One such law was enacted as far back as 1687 and ordered that "every owner of a house or houses in the said town [Newport] shall provide for every dwelling house a ladder to stand against each of the houses and that will reach up to or near the ridge of said houses, . . . or pay a fine of five shillings for default."¹

The act of 1859 (Chapter 294), provided that the town councils should pass ordinances regulating the construction of doors, stairways, and entrances to buildings, used for public amusement, lectures or addresses. This statute was for the protection of the public in general, and cannot, therefore, be considered as a labor law, but it was a forerunner of similar legislation designed especially to increase the safety of factory employment.

An act of 1878 (Chapter 688) entitled "An Act in Relation to the Buildings of Providence and for other Purposes," devotes considerable space to the matter of fire-

¹ Rhode Island Colonial Records, III, p. 234.

escapes. The act requires that every building in which twenty-five or more operatives are employed in any of the stories above the second story, shall be provided with proper and sufficiently strong and durable fire-escapes, or with stairways constructed according to certain requirements. Elaborate regulations were laid down for making the stairways, and the partitions adjacent to or surrounding them, fireproof. The penalty for violation was a fine of \$20 and an equal fine for each day's continuance of such violation. The enforcement of the act was delegated to the chief engineer of the fire department. This provision for enforcement was the weakest feature of the law, as the duties of this official other than those of inspecting buildings were sufficient to keep him occupied. It was pointed out by the Court, speaking through Judge Durfee, in case of *Grant v. Slater Mill and Power Company*, that the law provides for fire-escapes or stairways but does not state by whom these shall be constructed. Compliance with this statute was as lax as provision for its enforcement was weak.

By an act of 1881 (Chapter 870) town and city councils were given authority to pass ordinances requiring the owners of mills, shops and other buildings in which operatives are employed above the second story, to provide these buildings with "proper and sufficient fire-escapes or stairways," and to enforce these ordinances by penalty not exceeding \$20 for each violation. The passage of this act was directly due to the petition of the town of Pawtucket for power to pass such regulations.² It is seen that the matter of requiring this protection for factories was left as optional with the town and city councils, they were simply given authority to pass such ordinances if they deemed such action necessary. No pro-

² State Archives: Acts and Resolves of 1881.

vision was made as to how the towns and cities were to enforce these measures.⁸

Disastrous fires in the Fourth Street School of New York City and the Newell Hotel in Milwaukee, centered the attention of legislators upon the importance of fire-escapes. The law of 1881 reads that the town and city councils "may" pass the fire-escape ordinances. In the act of 1883 (Chapter 340), this phrasing is changed and the word "shall" employed. This change was intentional, for in the original draft of the bill as presented by Mr. Sheffield, of Newport, the term "may" was used and this stricken out and "shall" substituted. Though this phrasing was used, there was nothing in the act to make obligatory the passage of such ordinances by the council; no penalty was to be imposed upon these bodies for non-compliance. This statute is an improvement upon the one of 1881, since it orders that for each day the law is violated, a fine of \$10 shall be levied upon the person or corporation using a building which is not properly equipped with these safety devices. The town and city councils were required to designate officers to enforce the provisions of the act. This act was faulty in that it contained no coercive element by which the towns and cities could be compelled to pass the needed ordinances, but it marked a distinct advance in determining who

⁸ In April, 1882, Senator Dole introduced a bill providing that buildings should be equipped with proper stairways and with fire-escapes on the outside of the buildings extending to within ten feet of the ground. A fine of \$20 was imposed upon the owner or lessee of a building for each day the law was violated. Town councils were empowered to examine from time to time all structures in which persons were employed above the second floor. The act was passed by the Senate, but it being the last day of the session, there was not sufficient time for the bill to be brought before the House.—*Providence Journal*, April 22, 1882.

should be fined for violating the law, and in providing for officials of administration.

A definite provision for an official to enforce the law was made the same year (Chapter 359 of 1883) when the building act of Providence was amended by giving the city council of that city power to appoint an inspector of buildings. Previous to this act, this duty had devolved upon the chief engineer of the fire department.

The Law of 1890.—The inadequacy of previous laws for the protection of workers from fire, caused the enactment of the statute of 1890. The commissioner of industrial statistics for 1889 says: "It is left with the town and city authorities to pass such ordinances, rules and regulations as they may deem best, indeed it is optional with them whether they take any steps whatever, or not. I doubt if there is a town or city in the state which has adopted any rules and regulations which are of any benefit except as they apply to the construction of new buildings, and in *these* buildings very little attention is paid to fire-escapes and to other provisions for the safety of occupants. The old buildings are seldom if ever inspected by any one. . . . Certainly what law we have is utterly disregarded."⁴ The commissioner recommended that the General Assembly should enact laws to remedy these deficiencies, and that a State Inspector of Buildings be appointed to enforce the new statutes.⁵

Pursuant to these recommendations Mr. Lorin M. Cook introduced a bill at the January session, 1890, which, with a few subsequent amendments, forms the first nine sections of the present fire-escape law, Chapter 108 of General Laws, 1896. There was great opposition to the

⁴ Report of Commissioner of Industrial Statistics, 1889, p. 19.

⁵ *Ibid.*, p. 23.

passage of this act, certain owners of property worth many millions of dollars objecting to it on account of the expense they would incur.

The following is a summary of the provisions of this statute as it applies to factories and workshops, together with such amendments as have subsequently been made:

Sec. 1. Every factory or workshop in which employes are usually working above the second story, shall be provided by the owner either with strong and durable, metallic fire-escapes upon the external walls, or with incombustible stairways and stairs at opposite ends of the building.

Sec. 2. Town councils and the mayors of the several cities, except the city of Providence, shall annually appoint an inspector of buildings.

Secs. 3 and 4. Inspectors of Providence and other cities and towns shall examine the buildings in their respective jurisdictions, and should they deem a building unsafe shall give the owner notice to comply with the provisions of the law within sixty days.

Sec. 5. Inspectors are empowered to exempt from the provisions of the law buildings having special features of location or construction. The inspector may revoke such exemption after giving thirty days' notice to the owner of the building.

Sec. 6. When an inspector finds that a building has been properly equipped with fire-escapes or stairs, he shall upon the request of the owner, issue a certificate to that effect. This certificate shall, for a term of three years after its issue, exempt the owner of the building from all civil and criminal liability under this chapter.

By an act of 1895 (Chapter 1369) this section was amended by striking out all limitation upon the period of

exemption. Having once obtained a certificate stating that his building was properly equipped, the owner is exempt from all liability for an indefinite period. The inspector might revoke the certificate, but there is not much probability of this being done. The old form of the law is the better one, for it at least made probable the inspection of buildings every three years. It is true, even under the old law the inspector could at the end of three years re-issue the certificate without re-examining the building. This indefinite period of exemption from liability tends to encourage the owners in not keeping the safety devices of buildings in proper repair. In case of an accident caused by a decayed fire-escape, it would be difficult for injured workers to secure damages from the owner of a building if this owner had in his possession a certificate of exemption. Under the law, it would probably be a sufficient defense for the owner to hold that responsibility for the accident rested upon the town or city, even though the certificate be a score of years old.

Sec. 7. The owner of a leased building may enter the premises for the purpose of complying with this act.

Sec. 8. The owner of a building shall be liable for damages for the death or injury of any person caused by violation of this act.

Sec. 9. Owners of buildings failing to comply with this act shall be liable to a fine of not less than \$100 nor more than \$500.

In 1891, an act was passed providing that the mayor of each city every third year appoint three men as a board of appeal from the action or decisions of the inspector of buildings (Chapter 992 of 1891). This act is the same as sections 10-14 of the present law (General Laws, Chapter 108).

In 1896 (Chapter 367) the inspector of buildings of

Providence was authorized to appoint one or more assistants subject to the approval of the Board of Aldermen. The duties of the inspectors are given in more detail, but in general are similar to those given in the act of 1878 (Chapter 688).

By the factory inspection act of 1894 (Chapter 1278, Sec. 9) it was provided that if the factory inspectors find "that the means of egress in case of fire or other disaster is not sufficient or in accordance with all the requirements of the law . . . he shall notify the proprietor of the factory or workshop to make the alterations or additions necessary within ninety days." It is seen that law requires the *proprietor* of the establishment to make the necessary changes, whereas the other laws hold that this is the duty of the *owner* of the building in which the factory is housed. The proprietor of a business and the owner of the building in which the business is carried on, need not be one and the same person. For this reason, this section of the factory act of 1894,—and it is the law today,—is not in agreement with other laws relating to fire-escapes.

ADMINISTRATION OF THE FIRE-ESCAPE LAW.

Before 1890, there was no fire-escape law applying to all sections of the state. There was a statute requiring towns and cities to pass ordinances providing for such safety devices, but no means were furnished for compelling the towns to take such action. The city of Providence, as has been seen, had more definite statutes. It is not unnatural, therefore, that the administration of these laws was unsatisfactory. The commissioner of industrial statistics for 1887, reported there had been steady improvement, but that some mills still were entirely without fire-escapes and that some of those which

had been put up were comparatively useless.⁶ The commissioner for 1889 is more emphatic in his condemnation, when he says: "There are many buildings throughout the State and especially in the city of Providence, which are lacking in means of escape in case of fire. . . . The old buildings are seldom if ever inspected by anyone. . . . It seems to me in matters of such importance to life and to safety of person, our laws are of but little consequence; certainly what law we have is utterly disregarded."⁷ Some complaints from the workers indicate that conditions were not satisfactory.⁸

Since the act of 1890, the law has been better observed, so that at the present time conditions regarding fire-escapes may in general be said to be satisfactory. Mr. Lorin M. Cook, who introduced the act of 1890, says of its present administration: "The enforcement of the law at the present time I believe to be fairly good, indeed I may say better than might be expected."⁹ The provisions of the law are not of a very high grade, since they require fire-escapes *or* a double system of stairs. A better law, perhaps, would be one requiring fire-escapes *and*

⁶ Report Commissioner Industrial Statistics, 1887, p. 17.

⁷ Report Commissioner Industrial Statistics, 1889, p. 19.

⁸ Returns from workingwomen to Commissioner Industrial Statistics, 1889: Weaver—In case of fire we could not get out of the mill, because there is a heavy wire screen nailed upon all the windows—p. 151. Shoemaker—There is but one egress from the room in which 260 girls are employed. The stairways will not safely accommodate two abreast, for they are very winding—p. 153. Shoemaker in Rubber Factory—I work in a room where 273 are employed. There are but four escapes to get out on, and they are impossible to reach on account of the railing around the ladder and the distance from the window. We are in the fourth story of the building. The mixtures used in rubber goods are explosive in case of fire—p. 151.

⁹ Letter of January 27, 1908.

stairs. It is probable that such a law could not be passed.

The great majority of the factories have stairs at each end of the building. In the older buildings these were so constructed because of the increased convenience they afforded rather than with any idea of guarding the occupants from fire. The presence of stairs at each end of a building fulfills the requirements of the law, but this does not give adequate protection. In case of an explosion or sudden ignition of very inflammable material in the lower story of a building, the stairways would become so filled with smoke that they could not be used. Factory workers, as a rule, are very excitable and easily stampeded. The best systems of fire-escapes and stairs will not prevent this, unless the workers have been trained by fire drills. One very evident need, even in those buildings which are well equipped, is that the location of the escapes should be marked. In some buildings there may be a number of different establishments and the employees of a majority of these may not know which are the entrances leading to these safety devices. This is especially true of those buildings in Providence in which are located many separate jewelry shops. It might be well to prescribe by law that the location of these fire-escapes be indicated at the entrances of the rooms opening upon them. Another provision needed is one requiring that all doors of factories must open outward.¹⁰ In the event of a stampede and resulting rush of the workers, doors that open inwardly are sometimes closed, and those at the front of the crowd are forced forward so violently that it is impossible for them to gain an outlet for themselves and the struggling masses in the rear. Recent

¹⁰ Such an act passed the House at the January session, 1907, but failed to be reported by the Senate Committee on special legislation.

accidents in various parts of the country have shown the need of such a law.

I. ELEVATORS.

The laws regarding elevators are closely connected with those concerning fire-escapes, so that these two phases of factory legislation are often included in the same statute. There are, however, some acts which relate only to elevators, and for this reason it has been deemed best to group under one heading all the laws upon this topic.

The first law in Rhode Island regulating the construction of elevators seems to have been the building law of Providence, passed in 1878, (Chapter 688). It was here ordered (Section 25) that hoistways or elevator shafts, not enclosed by fireproof partitions and doors, should be protected by "good and substantial railing and good and sufficient trap-doors." The penalty for violation of the law was a fine of \$20 for each offence and \$20 for each day such violation was continued. The law does not state by whom these elevator guards were to be constructed. The chief engineer of the fire department of Providence was made responsible for the administration of the statute.

At the May session, 1880, an act was introduced in the House providing for an inspection of elevators in cities and towns.¹¹ Two years later the State Senate passed a resolution instructing its committee on judiciary to ascertain if legislation was needed for the better safety of elevators.¹² Several serious accidents in Fall River and in New York City had called attention to the danger of unguarded elevators.

¹¹ Providence Journal, May 28, 1880.

¹² Providence Weekly Journal, Feb. 10, 1882.

By an act of 1883 (Chapter 340), town councils and city councils were required to pass ordinances regulating the construction, location and operation of elevators and hoistways used for the carriage of persons or of merchandise, and to provide for the punishment of persons committing a violation of these ordinances by a fine not exceeding \$5 for each day of such violation. The towns and cities were further required to designate officers to enforce these regulations. Though the statute is obligatory in its phrasing, the term "shall" being employed, it contains no provision by which the different communities were to be compelled to enact such ordinances; and, as a consequence, the law was in most instances disregarded.

By another act of 1883 (Chapter 359) the City Council of Providence was empowered to appoint an inspector of buildings to relieve the chief engineer of the fire department of the additional duties of inspection imposed by the act of 1878 (Chapter 688).

The Laws of 1894.—During the decade following 1883 no legislation concerning elevators was enacted. In 1894, the two acts which form the body of the present law were passed. The first of these is contained in Section 5 of the factory inspection law (Chapter 1278). It was here ordered that the owner, agent, or lessee of any factory or mercantile establishment should cause all hoisting shafts or well holes in his establishment to be so inclosed or secured as would, in the opinion of the factory inspectors, be necessary to protect the life or limbs of those employed in such buildings. It was further provided that, if the inspectors so directed, trap or automatic doors, should be fastened in all elevator ways so as to form substantial surfaces when closed, and so constructed as to open and close by action of the elevator.

It is seen that this law had the failing common to earlier legislation: it did not specify by whom these elevator guards should be constructed. "The owner, agent, or lessee" of the building are named, but the responsibility is not fixed upon any one of these. It is to be noted also that the entire interpretation of this section is left with the factory inspectors, it not being necessary for the owner, agent or lessee to install these elevator guards before such an order is issued by the inspectors.¹³

The other act (Chapter 1271 of 1894) is more definite in its provisions and fixes upon the owner of a building responsibility for violation of the statute. It rules that:

"Every elevator used for conveying persons or goods . . . the well of which elevator is not so protected as to be inaccessible from without while the elevator is moving, shall have attached to it some suitable appliance which shall give automatically, at all times, on every floor . . . a distinct, audible, warning signal that said elevator is in motion."

It was also provided that "all hoistways and elevator openings through floors where there is no shaft" should "be protected by sufficient railings, gates, trap-doors, or other mechanical devices, equivalent thereto."¹⁴ The inspectors of buildings were authorized to inspect all elevators in their respective jurisdictions, and, should the law be violated, to notify the *owner or owners* to comply with the statute within thirty days after the receipt of such notice. A fine of not less than \$5 nor more than \$10 was provided for each day the law was violated.

An act of 1901 (Chapter 921) amended the above law

¹³ This indefinite provision was superceded by Act 973 of 1902.

¹⁴ The provisions as to passenger elevators apply more particularly to office buildings than to factories and are, therefore, not considered here.

by fixing the penalty for violation of its provisions at a fine of not less than \$50 nor more than \$100 for each offense. In 1902 (Chapter 973) this amendment of 1901 was repealed and the penalty was made the same as in the law of 1894. This statute of 1902 made several important changes in the elevator law. The owner *and* the lessee of a building were made responsible for violations of the statute. In like manner, the owner and the lessee were jointly made liable for the injury or death of a person caused by non-compliance with this measure. By this act it was also ordered that factory inspectors should inspect elevators in any city or town where there is no inspector of buildings. From this it appears that the factory inspectors are not responsible for the enforcement of the elevator law in communities which have inspectors of buildings. Since this act repealed all previous legislation inconsistent with its provisions, it therefore annulled that portion of the 5th section of the factory act of 1894 (Chapter 1278) ordering that "the owner, agent, or lessee" should make such changes as were ordered by the factory inspector. The owner and the lessee are now jointly responsible.

ADMINISTRATION OF THE ELEVATOR LAW.

The law regarding elevators is well enforced. The owner and the lessee of a building may take their choice of three methods of guarding against elevator accidents:

1. The elevator may be equipped so as to give automatically on every floor a signal that it is in motion.
2. The elevator shaft may be enclosed.
3. Trap-doors may be so fastened in elevator ways as to form substantial surfaces when closed, and so constructed as to open and shut by action of the elevator.

None of these methods are very expensive. In all the factories which the writer visited or in which he secured employment during the

past summer, the elevators were equipped with one or more of these safeguards. A large number of the mill owners have adopted the efficient method of enclosing their elevator ways.

While the plan of fastening in the elevator ways trap-doors that will open and shut by the action of the elevator, complies with the law, it is a very doubtful protection. There is danger that some one may be standing on these trap-doors when, without warning, the elevator bursts through from the story below. Such an accident happened in 1901 when a boy, who was standing on such a trap-door in one of the large mills, was crushed between the door and wall by the rising elevator. These trap-doors were for the most part installed by the mill owners before the passage of the factory act, for the purpose of lessening fire risks and thereby reducing insurance rates. The law should require that such doors be protected by railings.

CHAPTER VI.

THE BUREAU OF INDUSTRIAL STATISTICS.

After the enactment of the ten-hour law in 1885, the leaders of organized labor directed their efforts to the passage of an act establishing a bureau of labor statistics. The union men were actuated in this movement by the desire to secure some governmental agency which would give publicity to labor conditions and furnish data on which could be based demands for additional legislation.¹

The Knights of Labor took the initiative in this agitation. The first demand of this labor organization as set forth in the preamble of 1878 was for "the establishment of Bureaus of Labor Statistics, that we may arrive at a correct knowledge of the educational, moral, and financial condition of the laboring classes." The Knights steadily increased their numbers in Rhode Island, and by 1886 had, it is said, sixty-four local assemblies and over twelve thousand members. The leaders of these men had been trained, by their long fight for the ten-hour law, in the most efficient methods of supporting a labor measure, and they made use of this experience in their present undertaking.

The passage of the act might have been delayed had it

¹ It is interesting to note that a bill for the establishment of a Bureau of Statistics for Rhode Island was reported by a committee at the January session of the General Assembly in 1850. The Providence Journal in speaking of the matter remarked: "Too little regard has been paid among us to statistical information and we are convinced that great benefits would follow the classification of agricultural and industrial statistics of the State. We hope it will engage the earnest attention of the General Assembly." (Providence Journal, Feb. 18, 1850.)

not been for the political situation in 1887. The citizens of the state had the previous year passed a constitutional amendment in favor of prohibition. General Charles R. Brayton was elected by the Legislature Chief of State Police to enforce this law. The choice of General Brayton, the methods used in securing his election, and the unchecked violation of the Constitutional decree, aroused the utmost indignation of the Rhode Islanders. President Robinson, of Brown University, at a mass meeting held June 2, 1886, said: "I have done some honest work in behalf of what is known as the Republican party. But, if it is carried on as the last legislature has carried on its work, I say the sooner the Republican party is put in the ground beyond the hope of resurrection, the better."² The Providence Journal, the old standby of Rhode Island Republicanism, is found pointing out that "for the first time since the outbreak of the war of the rebellion, the political supremacy of the Republican party was seriously threatened with overthrow." This was due, the Journal said, "to scandals and follies which in the last year have alienated or rendered doubtful the allegiance of a very considerable element of intelligent and independent citizens."³

The party in power was therefore anxious to conciliate the labor vote and thus re-inforce its waning strength. The Democrats had for several years been supporting the movement for establishing a bureau of labor statistics. In 1887, the Republican platform declared for such a statute.

The year 1887 was marked by serious labor disturbances. The mill hands throughout New England made such increased demands that the manufacturers found it

² As reported in Providence Journal, June 3, 1886.

³ Providence Journal, March 1, 1887.

necessary to form an association in order to deal more effectively with strikes. The great railroad strikes on the western railroads made the workers in all parts of the nation more conscious of their power. Men with property rights to guard were, therefore, ready to support legislation which, it was thought, would calm this restless and militant spirit of labor. This desire of the manufacturers to placate their employes, combined with exigencies of the political situation, made clear sailing for the act establishing a bureau of industrial statistics. The workmen had planned for a bureau of labor statistics, but they agreed to the present title of the department, it being understood that the bureau would give its chief attention to investigations of labor conditions.

Provisions of the Act.—The law (Chapter 621) provided that the Governor should in June, 1887, and every two years thereafter, appoint a commissioner of industrial statistics. The duties and powers of this commissioner are stated in these terms:

Sec. 1. The commissioner of industrial statistics shall be *ex-officio* superintendent of the census of the state and shall perform the duties prescribed in chapter 69, and in addition thereto he shall collect, arrange, tabulate and publish, in a report by him to be made to the general assembly annually in January, the facts and statistical details in relation to the condition of labor and business in all mechanical, manufacturing, commercial, and other industrial business of the state, and especially in relation to the social, educational, and sanitary condition of the laboring classes, with such suggestions as he may deem proper for the improvement of their condition and the bettering of their advantages for intellectual and moral instruction, together with such other information as he may deem to be useful to the general assembly in the proper

performance of its legislative duties in reference to the subjects in regard to which he is required to report.

Sec. 2. Every employer of labor, and every person engaged in any industrial pursuit, shall give the commissioner of industrial statistics all proper and necessary information to enable him to perform the duties herein required of him, and in default thereof, upon reasonable demand, shall be fined twenty dollars.

The commissioner's salary was fixed at \$2,000 per annum. He could, with the consent of the Governor, employ assistants and incur expenses incident to the proper discharge of the duties of his office, not exceeding \$2,000 per year.

Subsequent Changes in the Law.—The changes made in the law deal with the appropriation allowed for office expenses and with the manner of appointing the commissioner and his assistants. With these exceptions the statute remains as it was passed in 1887.

In 1888 and 1889, the commissioner complained that the appropriation for office expenses was not sufficient, and asked for a more liberal grant. In 1890, this request was granted by the legislature's increasing the allowance from \$2,000 to \$3,000 per year.

By an act of 1901 (Chapter 809, Section 13) the power of appointing the commissioner was taken from the Governor and vested in the Senate. That is another section of the blanket measure of 1901, which was successfully designed to keep the patronage of the state offices under control of the political party then dominating the legislature. The commissioner was made responsible to the Senate alone, and therefore to the party in control of the Senate. This law has already been discussed in connection with the appointment of factory inspectors.

An act of 1902 (Chapter 1105) abolished what remaining power the Governor had over the bureau, by striking out the provision of the law requiring that in the appointment of his assistants the commissioner must have the approval of the Governor.

By a resolution of the General Assembly passed April 23, 1907, \$5,000 was appropriated to enable the commissioner of industrial statistics to investigate and report upon the number of wage earners in selected industries of Rhode Island, to classify such workers by age periods and sex, and to report on the rate of wages and cost of living in 1900 and 1906.

ADMINISTRATION AND RESULTS.

The labor leaders of 1887 expected that the Bureau of Industrial Statistics would be a great instrument by which the life and work of the toilers would be made known to the public. These expectations have not been fulfilled, and it is doubtful if the bureau has been worth its cost to the state.

The workmen thought that the commissioners would be chosen from men prominent in labor circles. In this they have been disappointed, for very few, if any, of these officials can be said to have been actively connected with the working class. While the complaints of the unions against the inefficiency of the bureau are well founded, it is also true that the labor organizations have encouraged their members to refuse giving information to the bureau officials, on the ground that their inquiries were attempts to ascertain the strength of unionism. The union members have demanded that the manufacturers supply information relating to child labor, cost of material, and capital invested, but have themselves often refused to answer the inquiries ad-

dressed to them by the bureau. Neither the business men nor the laborers seem to have taken the department seriously. So far as the writer has been able to learn, the average workman does not know that such an office exists. The business man gives little attention to the bureau, because he knows that the industrial statistics given are necessarily incomplete and, sometimes, judging from his own returns to the bureau, he doubts the accuracy of such reports. The present commissioner, in his report for 1905, charges that in previous years the manufacturers had practically been making a farce out of their returns to the department. It will be interesting to see how he will "impress upon them" that this practice must stop.⁴

Mr. Bowditch, the first and perhaps the best of the commissioners, early realized that it was impossible for the bureau to compel the manufacturers to furnish accurate statistics, and he did not hesitate to state such to be his conviction.⁵

It is thus seen that the bureau has little power to collect reliable statistics. Such material as has been

⁴"Upon investigation it seemed probable that the manufacturers of Rhode Island had been submitting reports from year to year, made up in a perfunctory manner from reports of the preceding year, copies of which were kept in the manufacturers' offices for future use, and it seemed all the more necessary to impress upon them the fact that the Bureau of Industrial Statistics was interested in publishing something more than figures." Report of Commissioner of Industrial Statistics, 1905, p. 6.

⁵"The law which created the bureau makes the giving of all 'proper and necessary information' obligatory, but there is no rule to determine what questions would be proper and what improper. Statistics are only valuable where they are approximately exact, and it would be almost as difficult to compel an individual to give an *exact* statement in regard to his business affairs as to compel him to tell what he was thinking about at any particular moment."—Report of Commissioner of Industrial Statistics, 1888, p. 3.

obtained has in many instances not been presented in the most helpful manner. The average man, be he manufacturer or laborer, has neither the time of Methusaleh nor the patience of Job to go through the unsummarized and undigested statistics of which many of these reports consist.

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PROGRESSIVE TAXATION

IN

THEORY and PRACTICE

by

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McVICKAR PROFESSOR OF POLITICAL ECONOMY
COLUMBIA UNIVERSITY

SECOND EDITION
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PREFACE TO THE SECOND EDITION.

The projected appearance of a French translation of this book, as well as the great increase of interest recently manifested in the subject, has furnished the inducement to this revision. In the fourteen years that have elapsed since the first edition was published, there have been many changes in legislation, and not a few important contributions to the discussion of the subject. An endeavor has therefore been made to bring the book down to date from both points of view. This has necessitated an almost complete re-writing of the first part, and not inconsiderable changes in the second part. With every effort to avoid undue amplification, the volume has swollen to a size half as large again as the original. In all the essential conclusions, however, I have found no occasion for any substantial modification of the views which were originally set forth.

EDWIN R. A. SELIGMAN

*Columbia University,
December, 1908.*

PROGRESSIVE TAXATION IN THEORY AND PRACTICE.

INTRODUCTION.

The question of proportional *versus* progressive taxation has not been settled in either theory or practice. A survey of the history of taxation will show repeated attempts made to introduce the progressive principle, from the early legislation of Solon down to the present time. If we confine ourselves to the nineteenth century we shall find, indeed, that the general sentiment in many places is in favor of proportional taxation, but that on the other hand almost every country has to some extent introduced the progressive principle into its tax system. This is true not only in monarchies like those of continental Europe and Japan, but in democracies like those of America, Australia and Switzerland. To give a few instances: we find progressive income taxes in most of the German states, Austria, Sweden, Denmark, Holland and Belgium as well as in Switzerland; progressive rental taxes in France and Australia; progressive property taxes in Switzerland, Holland and Australia; and progressive inheritance taxes in France, Germany, England, Switzerland, Australia, Canada and elsewhere. Even in the United States, which is supposed to be *par excellence* the home of proportional taxation, we have had a progressive property tax, like the federalist house tax, and some decidedly progressive income taxes, both national and local; and we still have progressive income taxes, progressive inheritance taxes, and progressive land taxes. It is hence idle to claim that proportional taxation is the

rule: on the contrary, practice seems to be tending more and more to the partial or complete adoption of the progressive principle. It may be useful, therefore, to pass in review not only the facts of the case, but the arguments on both sides in order to ascertain how, if at all, agreement may be secured. This discussion seems all the more necessary because no comprehensive attempt to present either the facts or the views of the chief representatives of the different schools has yet been made.¹

A word first as to nomenclature. In a certain sense the distinction between proportional and progressive taxation is illogical, for progression is also a kind of proportion. In the one case the tax may increase by a proportionate increment of the tax, the rate remaining the same; in the other case the tax may increase by a proportionate increment of the rate, the rate changing *pari passu* with the amount. In both cases we have a proportion, although the results of the proportion are very different. Strictly

¹ There is one essay on the history of the theory by Lehr, "Kritische Bemerkungen zu den wichtigeren für und wider den progressiven Steuerfuss vorgebrachten Gründe," in *Jahrbücher für Nationalökonomie und Statistik*, vol. 29 (1877), pp. 1 and 190. But Lehr's essay is confused and not very critical. Moreover it is composed chiefly of long extracts from the German and a very few of the French authors, almost entirely disregarding all other countries. Finally it is antiquated, because most of the valuable discussion has taken place in the last generation.—The best book on the facts is Neumann, *Die progressive Einkommensteuer im Staats- und Gemeinde-Haushalt*, 1874. As the title indicates, this study is confined to the income tax. It, also, is antiquated.

Since the present work was originally published, a young Italian, Masè-Dari, has written a book of over 700 pages under the title of *La Imposta Progressiva, Indagini di Storia e d'Economia della Finanza*, 1897. Excellent as is the work in many respects, it is unnecessarily elaborate, and is replete with all manner of discussions which have only the slightest connection with progressive taxation. Cf. also the two essays of Max Grabein, "Beiträge zur Geschichte der Lehre von der Steuerprogression" in *Finanz Archiv*, vol. xii (1895), and vol. xiii (1896).

speaking, therefore, the distinction ought to be drawn, not between proportion and progression, but between two kinds of proportion—regular proportion and progressive proportion. Again, the progression, if we adopt the term, may itself be either proportional or progressive: a proportional progression being an increase of the rate at an arithmetical ratio, a progressive progression being an increase at a geometrical ratio.

Passing by these rather subtle objections, however, and accepting the commonly received distinction as sufficiently obvious for all practical purposes, let us see what is really meant by progressive taxation.

A tax may be said to be proportional when the mathematical relation between the amount of the tax and that of the thing taxed remains the same. A tax is progressive when the relation varies in such a way that, as the amount taxed itself increases, the tax will represent a continually larger fraction of that amount. Ordinarily this means that the rate increases with the amount taxed. This is, however, not necessarily the case. For the rate may remain the same, while the change in the relation may be effected by an alteration in the amount assessed; that is, by applying the same rate of tax to a continually smaller increment of the thing taxed. Practically, of course, the result is identical; for if we start with a given rate and a given amount, the same rate on a smaller amount is equivalent to a higher rate on the same amount.

The term commonly employed in England is graduated taxation. This is misleading. If a tax is graduated in lieu of being proportional, the graduation may be either upward or downward. Proportional taxation in the ordinarily accepted signification means the same rate on all quantities of the thing taxed, whether this consists of property or of income or of anything else; graduated

taxation may mean that the rate either decreases or increases as the amount of property or of income increases. When the rate increases with the amount of the income, for instance, we have progressive taxation; and that is what the English writers generally mean by graduated taxation. But when the rate decreases as the income increases, the tax is also graduated. The technical term for such taxation is regressive taxation—what the French call upside-down progressive taxation (*progression à rebours*).² Graduated taxation in the wider sense thus includes both progressive and regressive taxation.

Finally, a third method is possible. The tax rate may increase up to a certain amount, but remain constant beyond that fixed point. There may be progression up to a definite limit, and proportion thereafter. The usual term for this is degressive taxation.³ The proportional rate is regarded as the normal one, but on all sums counted downward below this limit the tax rate gradually diminishes. Degressive taxation is also graduated taxation, and one of its most common forms.

Whether we call the tax progressive or degressive depends entirely on the point from which we count up or down; for even in progressive taxes the progression everywhere stops at a certain limit. The highest point known to history as actually enforced is thirty-seven and a half per cent. It could not conceivably exceed one hundred per cent. Nevertheless from one point of view the distinction between progression and degression is tenable. In de-

² Buckingham, *National Evils and Practical Remedies*, 1849, p. 338, speaks of a tax being "graduated the wrong way."

³ The term "progressional tax," used in a somewhat similar sense, is due to Joseph Garnier. It has not been generally adopted, and does not mean exactly the same thing as a degressive tax. It might best be translated as a moderate and limited progressive tax, as we shall see when we discuss Garnier below.

gression the ideal is proportional taxation, although a concession is made, through lower rates or exemptions or abatements, to the poorest classes who ought theoretically to pay the same rate but who are deemed to be unable to do so. In progression, the ideal is not proportional taxation: the wealthier classes pay higher rates because, according to the theory, they ought to assume a more than proportional burden. In progressive taxation graduation ordinarily begins from the point at which in the case of degressive taxation graduation stops and proportion begins. Nevertheless this precise point at which graduation commences is somewhat arbitrary. What one person would call degressive taxation another would call progressive taxation.⁴ While degressive and progressive tax-rates, however, have much in common, and are really two different ways of expressing what is essentially the same idea, degressive and regressive tax-rates are, in one sense, as we have seen, the very opposites of each other.

The terms "progressive tax" or "graduated tax" are also used in another way. If a different rate is levied on different kinds (not different amounts) of property or income, we speak not of a graduation but of a differentiation of the tax. But if different rates are levied on inheritances or bequests according to the degree of relationship of the heir or successor, the tax is sometimes called a "graduated" or "progressive" tax. In ordinary cases progression denotes a changed rate for altered amounts;

⁴ Ely, *Taxation in American States*, p. 77, uses the term "digressive," which is obviously a misprint. His explanation, however, like that of Daniels, *Public Finance*, p. 89, is inadequate. We have degressive taxes not only when a certain amount is entirely exempted, as we are told, but also when the smaller amounts below a moderate limit are taxed at a lower rate. The statement of Bastable, *Public Finance*, p. 292, is also inexact. In the 3rd ed. (1903), p. 316, the inexactness of the statement is only partly remedied.

in this case it denotes changed rates for the same amounts going to different persons. In the remainder of the present monograph the term will be employed in conformity with the ordinary usage which has come to apply to the collateral inheritance taxes of this kind the designation of graduated taxation.

The question of progressive taxation is not confined to the income tax. We may have progression in other direct taxes like the property tax, the house tax, the land tax, and the inheritance tax. There may even be progression in indirect taxes, and that, too, in a double sense. In the first place, the rates of certain imposts like stamp taxes, business taxes, or taxes on commodities may increase with criteria like the amount of the transaction, or sales, or capital, or capacity or production.⁵ Secondly, the progressive principle may be introduced into the general tax scheme by an arrangement in virtue of which articles of luxury are taxed at increasingly greater rates than articles of comfort or necessity.⁶ The discussion, however, has been limited almost entirely to direct taxation, and usually even to the income tax. There is no good reason why this

⁵ This is the sense in which progression is used by Josef Dierschke, *Progressive Besteuerung des Grossbetriebes bei einigen Verbrauchssteuern*, 1903, and Clément Charpentier, *La Progression dans les Impôts Indirects en Allemagne*, 1908, in which the so-called "Staffelsteuern" are studied. For these, see below, Part I, § 7.

⁶ This idea has been elaborately set forth recently by Franz Graf, *Das Problem der Luxussteuern*, 1905. Dr. Graf bases his contention on the principle that taxes on luxuries "würden den Progressionsgedanken, wenn auch nicht tadellos nach den finanzwissenschaftlichen Regeln, so doch in der Hauptsache, nachdrücklich zur Geltung bringen." *Op. cit.*, p. 25. In a very ingenious work by a French engineer, Louis-Léger Vauthier, *De l'Impôt Progressif, Étude sur l'Application de ce Mode de Prélèvement à un Impôt quelconque*, 1851, an attempt is made to show how the progressive principle may be logically and "arithmetically" applied to any kind of tax. See esp. chap. 6, and the formulas, pp. 87-91.

should be the case. In the following pages we shall treat of progression in general, taking up first the history and the actual condition of progressive taxation; secondly, the theory of progression in its historical and positive aspects; and finally the applicability of progression to the conditions as they exist in the United States at the present time.

PART .
THE HISTORY OF PROGRESSIVE
TAXATION.

§ 1. *Classic Antiquity.*

The earliest example of progressive taxation of which we have any knowledge is found in Athens. The facts are, however, not entirely beyond dispute. The direct tax (*εἰσφορά*) as levied in the time of Solon (B. C. 596) was a tax on property chiefly in the form of land, and was levied on the basis of the produce.¹ The population was divided into four classes (*τιμήματα*), as follows:

1. The *Pentakosiomedimni*, or those whose produce was valued at five hundred measures of dry products (*medimnus*) or liquid products (*metrete*).

2. The Knights (*ἵππηες*), or those who produced three hundred measures and could support a horse.

3. The *Zeugitae*, or owners of a yoke of cattle, who produced two hundred (or, according to others, one hundred and fifty) measures.

4. The *Thetes*, who produced less than the above.

Solon's design seems to have been to estimate the net produce of land at one-twelfth of the property. Reckoning a measure of produce as worth one drachma (about 17½ cents), the property of a *Pentakosiomedimnus* was assessed at a talent, i. e., twelve times 500 measures or 6,000 drachmas. According to the same calculation the value of a knight's property should have been fixed at

¹ Cf. Boeckh, *Public Economy of the Athenians*, book iv, chap. 5 (pp. 639-665 of the American translation, or vol. ii, pp. 25 *et seq.*, of the London edition of 1828). For Beloch's interpretation, which is somewhat different, see his article "Das Volksvermögen von Attika" in *Hermes*, vol. xx, 1885, pp. 237 *et seq.* Lécrivain also thinks that this is merely an hypothesis. See his article *εἰσφορά* in Daremberg and Saglio, *Dictionnaire des Antiquités Grecques et Romaines*, 1887. Cf. also P. Guiraud, *Études Économiques sur l'Antiquité*, 2 ed., 1905, pp. 77-79.

twelve times 300 measures or 3,600 drachmas, and that of the next class at twelve times 150 measures or 1,800 drachmas. The progressive (or degressive) principle, however, was introduced by assessing the property of the knights at only 3,000 drachmas, and that of the *Zeugitae* at only 1,000 drachmas, while the lowest class was entirely exempted. In other words, instead of changing the rate of the tax, a modification was made in the assessable portion of the property. The highest class was assessed at the full valuation of the property; in the second class the appraised valuation was fixed at five-sixths of the value of the property; while in the third class only five-ninths of the property was assessed. The rate remained the same, but the ratable valuation changed. The tax, therefore, was graduated.

The next account of the tax that has come down to us is during the archonship of Nausinicus (B. C. 380), although the tax may have been levied occasionally in the interval. By this time the property assessed included not only real estate but personalty. There were still four classes, but with no exemption for the lowest class and with a graduation in the tax. While there is some doubt as to the exact figures, it seems probable that the tax was now a progressive income tax. The rate was one per cent on the lowest class, composed of all those with an income below 25 minas (about \$427); five per cent on the second class, with incomes from 25 to 50 minas; ten per cent on the third class, with incomes from 50 to 100 minas; and twenty per cent on the fourth class, with incomes above 100 minas.² We possess no further details

² This is the explanation given by Rodbertus, "Untersuchungen zur Geschichte der römischen Tributsteuer seit Augustus," in Hildebrand's *Jahrbücher für National-Oekonomie und Statistik*, Band viii (1867), pp. 453 *et seq.* Although the figures are somewhat arbitrary, his explanation is preferable to the very involved interpreta-

of its workings.

In Rome, during the republic as well as the empire, nothing is known of any form of progression.⁸ Direct taxation played a very small rôle in the fiscal economy, and there is no evidence to show that a graduation of the tax was ever attempted. We must remember, moreover, that in Greece, as well as in Rome, direct taxes were levied only as a last resort and in the most extraordinary exigencies.

tion of Boeckh, who calls the tax "not a pure income tax, but, as it were, composed of a property and income tax," without clearly explaining the connection. *Public Economy of the Athenians*, p. 669. Parieu, *Traité des Impôts*, i, p. 416, who gives an account of this tax based on Boeckh's explanation, wrote before Rodbertus had published his investigations.

⁸ M. G. Platon has written a book to show the alleged "clearly progressive nature of the public revenues" in classic antiquity. See his *La Démocratie et le Régime Fiscal à Athènes, à Rome et de nos Jours*, 1899, esp. pp. 210-211. When his so-called facts, however, come to be examined, they will be found to vanish into thin air. The articles originally appeared in the Socialist periodical, *Devenir Social*.

§ 2. *The Middle Ages.*

With the growth of direct taxation in the middle ages we find several examples of progression, due in great part to the growth of the democratic spirit. It is hence natural that the chief mediæval progressive taxes should originate and develop in the towns and communes where the democratic spirit asserted itself most vigorously. It is true, indeed, that there are a few isolated examples of a progressive scale in the general state taxes. These were, however, in the main, class taxes or classified poll taxes, where the upper classes were made to bear the higher charges on the humanitarian principle of "le fort portant le faible," as it is expressed in the French and English laws, or as the Latin ordinance of 1367 reads: "ita quod pauperes per divites supportentur." In France we find this especially in the case of the *fouages*. A *fouage* was a tax or *taille* assessed on the *feux* or hearths, *feu* meaning a family or number of persons living under the same roof. A survival of this is the Sicilian *focatico*, which created so much disorder only a few years ago. The tax was originally so much per *feu* or family. This, however, became manifestly unjust in proportion as the property of the different families began to vary considerably. Thus the custom arose of levying the tax at different rates. Not only were the townsmen assessed at a higher sum than the peasants, but the rate imposed on different individuals was graded. Unfortunately the assessors generally inverted the legal principle and made the poor pay higher rates than the rich.¹

¹ Clamageran, *Histoire de l'impôt en France*, 1867, i, p. 402.

Based in part on these French laws were the English graduated poll tax of 1379 (in which the tax ranged from 4d. to £6, 13s. 4d.), and the poll tax of 1380 (which ranged from 2d. to 20s.).² The rates of the tax of 1379 were repeated in 1513, and slightly increased in 1614;³ while the same principle was applied at occasional intervals during the seventeenth century,⁴ the last instance of the classified poll tax being in 1698. In practice, however, the poll taxes were levied chiefly on the poor. They never became a part of the regular revenue in England, as they did in France.

In the mediæval property and income taxes, the progressive scale is likewise occasionally found. Thus the French *cinquantième*, or fiftieth, of 1295 was in part graduated. It was a combination of a property and an income tax. All persons having less than one hundred *sols* property paid a tax on their income from wages. On yearly wages the tax was a day's wage or one three hundred and sixty-fifth; on monthly or daily wages, the tax was fixed at six *deniers*. On property up to ten *livres* the rate of the tax was one-half of one per cent; from ten to one thousand *livres* the rate was two per cent, or a fiftieth (whence the name); while above one thousand *livres* the tax was fixed at twenty *livres*.⁵ It was thus a somewhat singular combination of degressive, proportional and fixed taxation. The tax was again levied in 1297 and 1301.

In England we find some sporadic examples of such property and income taxes. Thus in 1435 a graduated income tax was levied in three classes, the rates being 6d.,

² Dowell, *A History of Taxation and Taxes in England*, 2nd ed., 1888, i, p. 94.

³ *Ibid.*, i, pp. 129, 161.

⁴ In 1660, 1666, 1677 and 1689-1698. *Ibid.*, ii, pp. 29, 45.

⁵ Clamageran, *Histoire de l'impôt en France*, i, p. 314.

8d. and 2s. in the pound respectively, according as the yearly income was below £100, between £100 and £400, or above £400, incomes below £5 being exempt. That is, the rates were two and a half, three and a third, and ten per cent.⁶ In 1449-1450 the tax was repeated, with slight changes, the rates now being two and a half, five, and ten per cent, respectively, with the limit of exemption reduced to £1.⁷

In the mediæval German empire progressive general property taxes are also occasionally found, as for instance in the case of the *Reichsabschied* of 1512, when a progressive tax was imposed in order that "the poor should not be so grievously burdened."⁸

On the other hand, the general state taxes were sometimes regressive, instead of progressive. Thus the French ordinance of 1356 provided for a subsidy on incomes from real estate, salaries and mortgages. The rate was for all revenues above 100 *livres*, four *livres* for the first 100 and two *livres* for each succeeding 100 *livres*; between 40 and 100, two *livres*; between one and ten *livres*, one *livre*.⁹ That is to say, if we take the lower figures in each class the rate would be ten per cent for 10 *livres*, five per cent for 40 *livres*, four per cent for 100 *livres*, and two per cent above 100 *livres*. Moreover, the richer classes were exempt on all income above 1,000 or 5,000 *livres*, according as they were composed of non-nobles or nobles. So again in the next year a similar subsidy was granted with a rate of four per cent on revenues up to 100 *livres*, and two per cent on revenues exceeding that

⁶ Dowell, *op. cit.*, i, p. 113.

⁷ *Ibid.*, i, p. 116.

⁸ "Damit der Arme nicht so hochbeschwert und dem Reichen auch aufgesetzt werde, das er tragen möge," Judeich, *Die Rentensteuer im Königreiche Sachsen*, 1857, p. 6.

⁹ Clamageran, *op. cit.*, i, p. 368.

amount.¹⁰ Similarly in England Henry VIII levied an income tax on the regressive principle. Incomes were divided into four classes, £1-5, £5-10, £10-20 and over £20. The rates were in the case of movables 4*d.*, 8*d.*, 1*s.* 4*d.* and 2*s.* respectively; in the case of immovables 8*d.*, 1*s.* 4*d.*, 2*s.* and 3*s.* respectively.¹¹

Progressive taxation was thus by no means a distinguishing feature of the general state taxation. Political and economic relations were dominated by the feudal system, and the feudal system was essentially aristocratic in its nature. The financial conditions, as a reflex of the economic situation, necessarily had an aristocratic imprint.

In the communes and towns on the other hand there was more play for the democratic movement. At first when property was fairly equal, the ideal of justice seemed to be a proportional general property tax, which is found almost universally in England as well as on the continent, whenever resort was taken to extraordinary sources of revenue.¹² In several towns, however, a somewhat deeper analysis was made of the underlying principle, and the general property tax, instead of being progressive, was made regressive up to a certain point. The explanation of this phenomenon is not difficult. Individual faculty or ability to pay taxes was supposed to be in some manner determined by income. Property obviously yielded one kind of income—funded or unearned income as it is called in modern times. But income from labor—earned or unfunded income in the modern parlance—was also deemed to constitute a portion of taxable

¹⁰ Clamageran, *op. cit.*, i, p. 367.

¹¹ Vocke, *Geschichte der Steuern des britischen Reichs*, 1866, p. 510. Dowell does not mention this tax.

¹² See Seligman, *Essays in Taxation*, 5th ed., 1905, ch. v.

faculty. Many towns hence added to the general property tax a tax on the income from labor. That, as we know, was the method transplanted from Europe to the New England colonies. Other towns, however, sought to attain the same result in another way. It was assumed—and under the conditions of the time the assumption was roughly accurate—that the smaller the income from property the greater the income from labor; or in other words that the minor burghers who worked for their living would possess little, if any, property, and that up to a certain point the more property a man had, the less likely he would be to resort to manual labor. Hence, in the absence of an income tax, it would be necessary to assess the smaller property at a slightly higher rate than the larger property; for the higher rate on the smaller property would represent a property tax plus a labor-income tax, while in the case of the larger property the rate would represent simply a property tax. In this way it was thought that a rough proportion would be attained.

The best example of this method of taxation is found in the mediæval German towns. In Basel, whose financial history has been elaborately investigated, we find that the extraordinary property taxes were levied on this principle. In 1429, for instance, a tax was assessed at the general rate of two per cent on the highest member of each class. But on all property below two thousand gulden, the tax was divided into ten classes, the rate rising in each inferior class until in the lowest class (ten gulden and below) the tax was fixed at such an amount that the rate exceeded seventeen per cent on the ten gulden.¹⁸ Of the

¹⁸ The law fixed, not the rates, but the lump sums payable on each class of property assessed. The rate would thus differ according as the property was at the bottom or the top of the class. The following table will show the rates:

2,536 tax payers only 126, or five per cent, possessed property of over 2,000 gulden, although they paid 32 per cent of the tax; while the tax payers in the two lowest classes, 48.9 per cent of the total number, paid only 10.8 per cent of the tax. Again in 1451 the rate of the property tax was one per cent for the first 100 gulden and one-half of one per cent for every successive 100 gulden, thus constituting a slightly regressive tax.¹⁴ It is not necessary to go into the details of the other instances, as the principle was virtually the same.

In many of the mediæval towns this originally democratic character of the tax was modified by aristocratic and feudal influences; and even the ostensible proportionality of taxation frequently became a real inequality, pressing more heavily on the poorer classes. This was probably true in the great mass of cases. We know that it was a fact in the German towns,¹⁵ as well as in the French communes. In the latter instance this was due not only to the natural proclivities of the assessors, but also to the frequent purchases of exemption from taxation. When

Class	Gulden		Per cent.
1	0-	10.....	1000 -17.1
2	10-	50.....	45 -10
3	50-	100.....	14.7- 7.5
4	100-	150.....	9.9- 6.6
5	150-	300.....	13.2- 6.6
6	300-	500.....	8.3- 5
7	500-	750.....	5.9- 4
8	750-	1000.....	4.6- 3.5
9	1000-	1500.....	3.9- 2.6
10	1500-	2000.....	2.9- 2.2
11	2000-	2500.....	2.4- 2

Cf. Schönberg, *Finanzverhältnisse der Stadt Basel im xiv. und xv. Jahrhundert*, 1879, p. 175.

¹⁴ *Ibid.*, p. 284.

¹⁵ Zeumer, *Die deutschen Städtesteuern im xii. und xiii. Jahrhundert*, 1878, pp. 90, 91.

the history of English local finance comes to be written in detail, the same will probably be found to be the case there. In the provincial income taxes in France during the sixteenth century it was even provided that no one could be held to pay more than a definite sum, no matter how great his fortune. In Lille this limit was fixed at one thousand florins. The wealthier the tax payer, the lower the rate of the tax.¹⁶

In some places, however, where the differences of wealth became very marked, the democratic spirit asserted itself at times more vigorously. This is especially true of the Italian republics at the period of their great commercial prosperity, when the conditions of the towns resembled those of modern times more closely than at any other period or in any other country. The Italian cities, and especially Florence, are therefore the chief examples of actual progressive taxation in the middle ages.

¹⁶ Houdoy, *L'Impôt sur le Revenu au xvi. siècle.. Les États de Lille et le Duc d'Albe*, 1873, chap. iii, p. 345. In the earlier centuries we find occasional examples of progressive taxation in the towns as at Donai in the case of the forced loan of 1302, where in addition to the ordinary rate of ten per cent on movables, an extra tax of two per cent was levied on all property over fifty livres in value. Cf. G. Espinas, *Les Finances de la Commune de Donai des Origines au xv^e siècle*, 1902, p. 141.

§ 3. *The Italian Republics.*

In Florence, as in the other mediæval towns, the general property tax was employed whenever it became necessary to secure extraordinary revenues. The original property tax or *estimo* was supplanted in 1427 by the *catasto*, which was a tax on the capitalized value of incomes from movables as well as immovables. The capitalization was made at different rates. This is not the place to trace the various steps in the development which finally led to the institution of the *decima* or tenth, a tax on the income from immovables only. What interests us here is not the fortune of the general property tax,¹ but the application of the progressive principle, under the general name of *scala*.

One of the chief reasons for the introduction of progression was the evasion by the wealthy of the proportional tax on personalty. It was hoped in this way to make the rich pay at all events their share of the burden, and thus in some sort to re-establish the balance. The Medici eagerly seized upon this democratic reasoning and converted the graduated tax into an engine for ruining their wealthy rivals. What was begun by the Medici, however, was continued by the democratic government which supplanted them.

The progressive rate was first applied to the general property tax or *catasto* in 1443. The tax was known as the *graziosa* or "gracious tax," because so favorable to the lower classes who had hitherto borne the chief bur-

¹ A history of the Florentine tax will be found in G. Canestrini, *La Scienza e l'Arte di Stato, desunta dagli Atti ufficiali della Repubblica Fiorentina e dei Medici. Ordinamenti Economici.—Della Finanza.. Parte I, L' Imposta sulla Ricchezza Mobile e Immobile.* Firenze 1862.

den. The "gracious tax" divided the tax payers into fourteen classes, the rate varying from four to thirty-three and a third per cent of the income, which was then capitalized.² To this was added a poll tax, likewise in fourteen classes, varying from one to eighty *soldi*. In 1447 the second progressive tax was levied. The number of classes remained the same, but the tax was now levied only on income, and the rates now varied from eight to fifty per cent. This was known as the *decima dispiacente* or "displeasing tax,"³ and continued at these rates for several years.

In 1480 the *scala* or progressive rate was applied not to the general property or income tax, but to the new tax on income from immovables only. There were now nine classes with rates from seven to twenty-two per cent, and there was joined to this a graduated poll tax. Henceforth the progressive rate was generally applied to all the extraordinary direct taxes, whatever their name or form. Sometimes it was applied to the *catasto* or capitalized general income tax, sometimes and more frequently to the *decima*⁴ or income tax on realty, sometimes to both the *catasto* and the *decima* when they were levied simultaneously. All kinds of combinations were made. At

² The six classes up to 300 florins were graded by differences of 50 florins; from 300 to 700 florins the steps were 100 florins; then came three additional classes with steps of 300, 200 and 300 florins respectively, until the final class included revenues of 1500 florins and over.—Canestrini, *op. cit.*, p. 217.

³ It was called *decima* because assessed by ten officials. Sometimes the taxes were assessed by a different number of officials, and they received the names of *ventine*, *novine*, *settime*, etc. *Ibid.*, p. 178. The distinction between a *piacente* and *dispiacente* was as follows: Old assessment rolls were often brought into requisition. When the assessor selected the highest roll, the tax was "displeasing;" when the choice was left to the tax payer, it was "pleasing." *Ibid.*, p. 186.

⁴ The *decima* or "tenth" must not be confused with the *decina*, mentioned in the preceding note.

times the rates were definitely fixed according to what was called the *regola* or *norma*; at other times the whole matter was left to the discretion of the assessors and hence known as *l'arbitrio*. In the intervals between the official valuations of the *catasto* the old lists were often taken out and the individual assessments arbitrarily increased or decreased. The tax was then known respectively as *l'aggravamento* or *lo sgravamento*.⁵ Sometimes the rate of progression was high, sometimes it was moderate, sometimes low, according as the whole scale, a half scale, or a third of a scale was adopted.

The history of the Florentine *decima scalata* has been utilized as a warning example of the inherent evils of progressive taxation. It can certainly not be denied that the results were disastrous, that individuals were frequently reduced to beggary, and that forced sales of property in order to pay the taxes were of common occurrence, notwithstanding the fact that as in all early times direct taxes were regarded as compulsory loans to the government, and that the tax payers were inscribed to the extent of the taxes as creditors of the state. M. Léon Say especially waxes eloquent over the abuses of the progressive system.⁶ He forgets, however, that the authority from which he takes all his facts expressly states that the fault lay not so much in the graduation as in the frequency and enormous extent, of the tax.⁷ Although Canestrini himself does not favor progressive taxation, he is fair-minded enough to say that we must distinguish between the progressive tax under modern conditions and

⁵ Canestrini, *op. cit.*, p. 185.

⁶ Léon Say, *La Question des Impôts*, 1886, i, chap. 4.

⁷ Canestrini, *op. cit.*, p. 204: "Inoltre vuolsi notare che non era precisamente la scala o la progressione dell' imposta che atterriva e rovinava i più ricchi, ma bensì la soverchia frequenza e la intollerabile enormezza delle imposte."

the abuse of the principle by the Medici in mediæval Florence.⁸ In fact we may go further, and say that the real source of the trouble was not the fact of progression at all, but the utter arbitrariness in the whole administration of the direct tax. It was the discretion left to the officials in levying the direct tax on personalty and on income which was mainly responsible for the actual abuses. It is perhaps true that the existence of the graduated scale rendered it somewhat easier for the government to ruin its adversaries, and there is no doubt that the rate of progression was at times extravagant. But it is quite erroneous to assume that the proportional rate denoted certainty, while the progressive rate involved uncertainty. In both cases the assessments were entirely arbitrary; and where the assessments are arbitrary there is practically nothing to choose between proportion and progression. The evils of progressive taxation under the later Medici, were no worse than the evils of proportional taxation under their predecessors; the abuses of progressive taxation in Florence were not a whit more glaring than the abuses of proportional taxation under the later Roman emperors.

Even after the expulsion of the Medici the republic, notwithstanding the reaction of the first few years, soon reintroduced the system of progressive taxes under the stress of political complications. The scale of graduation was somewhat reduced and some of the abuses were rectified. We find the *scala* from 1499 to 1506 and again during the troubles of 1529. But with the capitulation of Florence in the next year the system of progressive taxa-

⁸ "Il perchè dagli economisti doverebbesi distinguere il principio della scala e la sua applicazione nelle condizioni speciali della Repubblica fiorentina, e l' abuso del principio e della pratica di esso per opera dei Medici, dalla teorica e dalla sua attuazione nelle presenti condizioni sociali e politiche degli Stati." *Ibid.*

tion came to an end, with the exception of a single attempt to reintroduce a modified form of the old system in 1710.⁹

⁹ Canestrini, *op. cit.*, p. 307.

§ 4. *The Seventeenth and Eighteenth Centuries.*

During the seventeenth century we hear but little of progressive taxation. The scheme was proposed in Spain in 1676, where the industrials of Aragon suggested a progressive class tax to the Cortes of Calatayud.¹ During the eighteenth century, however, the instances become more frequent, until the revolution of 1789, and especially that of 1848, gave the signal for a far more widespread application of the principle during the nineteenth century.

In the first half of the eighteenth century there are to be noted a few examples of progressive taxation levied on extraordinary occasions. Thus in Holland a classified income tax was imposed in 1748, varying from one to two and a half per cent.² So in 1742 the Elector Frederick Augustus, of Saxony, established a progressive general income tax, in six classes, with rates varying from one to eight per cent. The tax was so arranged that each increment of the income paid a separate rate according to the class to which that increment belonged.³ The tax lasted until 1746, and was replaced by a clas-

¹ Colmeiro, *Historia de la Economia Politica in España*, 1863, ii, p. 576.

² Parieu, *Histoire des Impôts Généraux sur la Propriété et le Revenu*, 1856, p. 88, quoting from Engels, *De Geschiedenis der Belastingen in Nederland*. This tax can be traced back to 1715 when it was imposed with slightly different rates and lasted for a year. It was levied again in 1742, 1745 and 1747. Cf. Sickenga, *Geschiedenis der Nederlansche Belastingen*, 1878-1883.

³ For instance an income over 25,000 thalers, the highest class, would pay one per cent for the first 1,000, two per cent for the next 9,000, three per cent for the next 2,000, four per cent for the next 3,000, five per cent for the next 5,000, six per cent for the next 5,000, and eight per cent for the remainder. Judeich, *Die Rentensteuer im Königreiche Sachsen*, p. 12.

sified poll tax. In Geneva, on the other hand, where the extraordinary property tax of 1690 was levied on the progressive principle, graduation was imposed as a permanent system in the *taxe des gardes*, which was first levied in 1709. The rates were one-half of one per cent for the first 10,000 *écus*, and one per cent for the surplus.⁴

During the eighteenth century the principle of progression was applied within somewhat narrow limits to other taxes besides those on income. Thus the tax on inhabited houses in England, introduced by Lord North in 1778, provided for rates of 6*d.* and 1*s.* in the pound respectively, according as the annual value of the house was below or above £50. In 1779 the scale was slightly altered, and the tax was graduated in three classes at 6*d.*, 9*d.* and 1*s.* respectively. Although the three classes were maintained in the following years, the rates were somewhat changed, and in 1808 they were fixed at 1*s.* 6*d.*, 2*s.* 3*d.* and 2*s.* 10*d.* in the pound respectively. Minor alterations were made during the next two decades, until the tax itself was repealed in 1834. When the tax was reimposed in 1850 it was no longer graduated according to rental value but simply classified according to the purpose for which the building was used.⁵

The most important applications, however, of the progressive principle during the eighteenth century are to be found in France, where, during the revolutionary period, several attempts were made to impose a progressive tax.

When the direct income taxes in France were abolished by the Revolution, an effort was made in 1791 to substitute for them a so-called "personal and movables tax," *taxe personnelle et mobilière*, levied in great part on

⁴ Schanz, *Die Steuern der Schweiz in ihrer Entwicklung seit Beginn des 19ten Jahrhunderts*, iv, pp. 195, 196.

⁵ Dowell, *History of Taxation and Taxes in England*, iii, pp. 178-192.

the basis of house rent. The rental value was regarded as a rough presumptive index of the occupier's income, on the assumption that the greater the income, the smaller the portion devoted to house rent. In order, therefore, to attain a relatively proportional rate on the actual income, the scale of the rentals tax was made progressive. The rate of the tax was the same in every case—five per cent—but the houses were divided into eighteen classes. In the lowest class, with a rental value of 100 livres or less, the income was assumed to be twice the rental value; in the next class, with rental value to 500 livres, the income was assumed to be three times as great; and so on until in the eighteenth class, comprising rental values of 12,000 livres, the income was assumed to be twelve and a half times as great. In other words, the occupier of a 500 franc apartment paid the five per cent tax on 2,000 francs; the occupier of a 12,000 franc apartment paid the tax on 150,000 francs.⁵ The tax, although nominally progressive in character, was supposed to conform to the principle of real proportionality; it was progressive in relation to house rent, but proportional to real income, since expenditures for house rent grow, up to a certain point, faster than does income. This is brought out clearly in the report of Representative De Fermond, who first suggested it.⁶ The tax itself worked rather badly and was suspended in the year III.

⁵ Stourm, *Les Finances de l'Ancien Régime et la Révolution*, i, (1886), p. 250.

⁶ "Le tarif présente à raison de la différence des loyers, une progression croissante; progression que nous croyons indispensable, parce qu'il est reconnu que le pauvre prélève sur son revenu une somme plus forte pour la dépense de son loyer, et, comme c'est sur le revenu que l'imposition doit porter, il est nécessaire pour la rendre toujours proportionnelle au revenu, qu'en prenant pour base de l'indication des facultés une nature de dépense qui est d'autant plus forte que le revenu est plus faible, la progression du taux

This French tax served in part as the model of the progressive direct tax imposed by the federal government of the United States in 1798. Secretary Wolcott's plan for the direct tax comprised three taxes: on dwelling-houses, on slaves and on lands. He proposed in the case of houses a progressive tax with a fixed rate for each class of houses.⁷ Hamilton's project was a progressive tax, graduated according to the number of the rooms. The scheme finally adopted was due to Gallatin, who suggested a progressive tax graded according to market value. The tax, however, differed from the French tax of 1791 in that the progression attached not to the coefficient, but to the rate itself. That is, the houses were divided into nine classes, the lowest class comprising houses of the value of from \$100 to \$500, and the upper limit of each succeeding class being 1, 3, 6, 10, 15, 20, and 30 thousand dollars selling value. The rate of the tax varied from two to ten per mill respectively. This was the only progressive tax ever levied by the United States government until the period of the Civil War.

The French rentals tax was therefore an instance of ostensible, rather than of real progression. It was not long, however, before this experiment was followed by examples of actual progression. This forms so interesting and important a phase in the history of the subject that we shall deal with it in a separate section.

de l'imposition soit en raison inverse du rapport de cette nature de dépense avec le revenu sur lequel elle est prélevée."—Gomel, *Histoire Financière de l'Assemblée Constituante*, ii (1897), p. 336. This is also the view of Mathieu-Bodet, *Les Finances Françaises de 1870 à 1878*, ii, p. 72. M. Stourm, however, considers it a progressive tax. *Op. cit.*, p. 252.

⁷ Cf. the plan in *American State Papers, Finance*, i, p. 589. Hamilton's plan will be found in his works (Ford's edition), iii, p. 53. The plan actually adopted was that of the act of July 14th, 1798.

§ 5. *The French Revolution.*

With the progress of the Revolution, the radical sentiment grew stronger, and under the Convention various efforts were made to realize the progressive principle.¹

The first was at the close of 1792. The various towns had issued paper currency known as "Billets de Confiance," which were now made unnecessary by the new national "Assignats". A law of November 8, 1792, provided that this municipal paper issue be redeemed through the proceeds of loans or taxes. Cambon, who brought in the Committee report, declared that the taxes ought to be progressive and that the principle should be to tax "le citoyen riche infiniment plus que celui qui n'a qu'une fortune mediocre." He based his contention on the ground that the chief advantages of these paper issues had accrued to the rich. Another reason, not so openly avowed, was that the depreciation of the paper issues was laid at the door of the anti-revolutionary wealthy class. A few weeks later the principle was applied to Paris, which redeemed its issue by levying an impost supplementary to the land tax and the movables tax (*contributions foncière et mobilière*), according to a progressive scale ranging from 1/300th to 1/60th of the tax payers' income.² On the same date a somewhat similar tax was

¹ Cf. two essays by C. H. Gomel, one entitled "L'Impôt Progressif et l'Impôt Arbitraire en 1793," in the *Journal des Economistes*, tome 50 (1902), pp. 1 and 161; the other entitled "Les Taxes Révolutionnaires sous la Convention," in *Séances et Travaux de l'Académie des Sciences Morales et Politiques*, 65e Année, nouv. Série, vol. 64 (1905), pp. 59-80. The article by Stourm, "La Révolution et l'Impôt Progressif," in *L'Economiste Français* (1899), p. 664, is of slight value.

² Gomel, *Histoire Financière de la Législative et de la Convention*, i, (1902), p. 273.

authorized for Lyons, in order to purchase food for the people. One-half of the sum was to be raised as a proportional addition to the land tax, the other half from a progressive addition to that part of the "Mobilier" which was levied on house rentals. Since the tax on house rentals was supposed to equal $1/3000$ th part of the presumed income, the new additional tax was arranged in sixteen classes, so that the lowest class, with a presumed income of from 500 to 1,000 livres, paid only a simple addition, while the highest class with a presumed income of over 100,000 livres, paid an additional tax of five times the amount. Presumed incomes under 500 livres were exempted. The attempt of Mallarmé to increase the exemption to 1,500 livres failed to secure the assent of the Convention.⁸ On December 3 the same plan was extended to Rouen, and on February 7, 1793, to Paris, presumed incomes under 900 livres being in these cases exempt, and the taxables being divided into fifteen classes. It was in connection with this tax that Cambon made his earnest plea for progression, regarding the scheme as "offrant aux infortunés les secours qu'ils réclament, faisant payer aux riches la protection que leur accorde la loi et ne lésant que le Trésor public." The scheme was repeated twice in the next few weeks; first for Lyons, because of the stoppage of the silk industry on February 18; and then for Paris, because of the bread riots, on February 23. In the case of Lyons the progressive scale advanced from $1/300$ to $1/20$ of the presumed income.⁴

On January 6, 1793, Roland, the Minister of the Interior, made a long report in which he proposed the replacement of the *contribution mobilière* by a progressive

⁸ Gomel, *op. cit.*, p. 313. For a fuller scale see André de Retz de Serviez, *De l'Impôt Progressif dans l'Histoire en France de 1789 à 1870*, (1904), p. 83.

⁴ Gomel, *op. cit.*, 1, pp. 377-379.

income tax in thirty classes,⁵ but it was not adopted as the Convention was not yet ready for a general application of the progressive principle. It was not long, however, before this was accomplished. On March 9th the Commune of Paris sent an address to the Convention demanding a war tax to be levied on the rich. It read as follows: "La classe pauvre a fait constamment les sacrifices; tout, jusqu'à son sang a été prodigué pour la liberté. Il est temps que le riche égoïste partage les charges que la pauvre seul a supportés. Nous demandons qu'il soit imposé sur cette classe d'hommes une taxe de guerre." This raised such enthusiasm that it was easy for the Jacobin, Thuriot, to persuade the Convention to accept, virtually without further debate, the motion to inaugurate the scheme of a war tax on the rich and to refer it to a committee for study.⁶ On the next day Carnot brought in his draft of a declaration of rights, the 17th article of which contains in germ the progressive tax:

"La société a le droit d' établir les contributions qui sont nécessaires au maintien de l' indépendance et de la prospérité nationale, ainsi que de fixer le mode de leur perception, pourvu que ces contributions . . . portent uniquement sur les portions superflues du revenu territorial ou industriel de chacun des citoyens, avant que de peser sur les besoins de première nécessité.⁷

On March 18 Barère came out boldly for a general progressive tax. "C'est," he said, "une institution infiniment juste, quoique quelques personnes l'aient crue impossible." When he proposed to have the Committee on war taxes study it further, one of the members, Ramel-No-

⁵ *Archives parlementaires*, 1^o série, lvi, p. 692. Cf. de Retz de Serviez, *op. cit.*, p. 84.

⁶ Gomel, *op. cit.*, i, pp. 389-390.

⁷ Carnot, *Correspondance Générale*, edited by Charavay, i, (1898), p. 42.

garet, declared that there was no objection to apportioning "les charges publiques d'après des taxes progressives portant principalement sur le luxe et le superflu des riches." He therefore proposed the immediate adoption of a decree: "Pour atteindre à une proportion plus exacte des charges que chaque citoyen doit supporter en raison de ses facultés, il sera établi un impôt gradué et progressif sur le luxe et les richesses tant foncières que mobilières." This was adopted at once. Thus the Convention entered definitely upon the path of progressive taxation.⁸ A few days later, on March 23, Vernier made a report for the Committee on Taxation, in the course of which he warmly defended the progressive principle.⁹

On account of its importance the Minister of Finance, Clavière, had been asked in the mean time for his opinion on this suggestion. On February 1st he wrote, approving it in the following terms: "La Citoyen Vernier propose une contribution graduelle sur les parties du revenu des citoyens qui excèdent le véritable nécessaire. On ne peut nier qu'elle soit conforme aux meilleurs principes sociaux, et si la classe fortunée se dégage des préjugés de l'égoïsme, elle s'en plaindra d'autant moins que tout ce qui est nécessaire au rétablissement du crédit lui est nécessaire et avantageux."¹⁰ But neither on this day, nor on the succeeding day, March 26th, when Vernier made a supplementary proposition in favor of a progressive tax, did the Convention decide to follow him. Vernier's first plan was to exempt as the "nécessaire physique" 1,000 livres for each parent and 500 livres for each child, and to have the rate of taxation commence with 2½ per cent and rise

⁸ Gomel, *op. cit.*, i, pp. 421-2. As to Ramel and Barère see also R. Stourm, *Bibliographie Historique des Finances de la France au Dix-Huitième Siècle*, 1895, pp. 225-6.

⁹ This will be discussed below in Part II.

¹⁰ Gomel, *op. cit.*, i, p. 431.

to 9 per cent on incomes over 47,000 livres. His second plan was to double the exemption, while the rate of taxation was to begin at 2 per cent and to rise until it reached 50 per cent on incomes of 100,000 livres.¹¹

The movement was, however, growing. On April 27 and May 13 the Convention approved of the decision of the Department of Hérault to levy a forced loan of five millions on the rich, in the shape of a progressive tax; and on May 3 it approved of a similar forced loan of twelve millions to be raised by the Commune in Paris.¹² In the last place the exemption was fixed at 1,500 livres for the head of the family, and 1000 livres for every other member of the family, while on the surplus above this minimum, incomes from 1,000 to 2,000 livres paid 30 livres: those from 2,000 to 3,000 livres paid 50 livres, the tax rising at a rapid rate, until incomes from 40,000 to 50,000 livres paid 20,000 livres, (or 50 per cent of the lower figure), while incomes over 50,000 livres paid 100 per cent, i. e., were subject to entire confiscation.¹³ This was evidently going as far as it was possible to do.

All this, however, was insignificant compared with the national forced loan of 1,000 million livres. On January 22nd, the Convention decided that this should be levied only on those having an income of over 10,000 livres, if married, or over 6,000 livres if single. But on September 3-7, when the details were adopted, this minimum was dropped. According to the law, as finally enacted, 1,000 livres were exempt for each member of the family (except that married men and widows with children enjoyed an exemption up to 1,500 livres); of the surplus over the exemption the first 1,000 livres were taxed 10 per cent,

¹¹ Gomel, *op. cit.*, pp. 429, 434.

¹² *Ibid.*, i, pp. 465, 483.

¹³ *Ibid.*, i, p. 468. De Retz de Serviez, *op. cit.*, errs in saying that the rate was only 50 per cent.

the second thousand 20 per cent, and so on until the whole surplus over 9,000 livres was taxed 100 per cent; that is, taken entirely by the State.¹⁴

This virtual confiscation was so extreme that it gave rise to the greatest possible embarrassments and complaints, and although the period of collection was spread over two years it yielded only about one-fifth of the sum that had been anticipated.

Under the Directorate the experiment of a forced loan was repeated twice. The first project, which was adopted by the Council of Five Hundred on the 15th Frimaire, year IV, (December 17, 1795) and which became law four days later, levied a forced loan of 600 million livres. This was arranged in sixteen classes, the last class comprising all those who possessed a capital of more than 500,000 livres and who were held to pay from 1,500 to 6,000 livres, "according to their faculties." It yielded only eight millions. Nothing daunted, the Ancients adopted a similar scheme on the 19th Thermidor, year VII (August 6, 1798). The forced loan of one hundred millions was to assume the form of a supplement to the real estate tax. Those assessed to this tax at less than 300 livres were exempt; on assessments from 300 to 400 livres an addition of three-tenths was imposed, the rate rising gradually until on assessments from 1,000 to 1,100 livres the addition was equal to the original assessment; and on assessments from 3,000 to 4,000 livres it was double the original assessment. On assessments over 4,000 livres the matter was left to a jury with the sole provision that the real estate tax plus the addition of the forced loan was not to exceed three-fourths of the annual income. As the real estate tax was supposed to amount to fifteen per cent of the income, this means that the supplementary

¹⁴ Gomel, *op. cit.*, i, pp. 114-121.

progressive tax might be 400 per cent of the real estate tax. But in the case of certain other individuals who were supposed not to have been taxed at a sufficiently high rate, the jury might assess their entire income.¹⁵ The jury was composed of citizens not subject to the tax, and every tax-payer was invited to send in details as to the wealth of other tax payers.

This law was passed only after much discussion and objection, both¹⁶ in and out¹⁷ of the legislature; and its passage led almost to a crisis. The arbitrariness of the administration was so great that the tax proved exceedingly unequal in its operation; the wealthy generally escaped and the lower middle class as usual bore the chief burden. The yield moreover was deplorably small. After two and one-half months only sixty-one million livres out of the one hundred millions had been assessed, and of this less than half seemed possible of collection. In Paris out of the twelve millions anticipated, only 900,000 livres were actually collected. Before the period of collection expired, however, the *coup d'état* of the 18th Brumaire took place, a revolution to which the attempt to levy this forced loan had contributed not a little.¹⁸

A few days later, on November 13, 1799, the new Min-

¹⁵ "Le jury évaluerait en son âme et conscience la fortune de ceux qui par leurs entreprises, fournitures ou spéculations auraient acquis une fortune non suffisamment atteinte par la base des contributions."—Albert Vandal, "Les Causes Directes du Dix-Huit Brumaire. III. Impôt Progressif et Loi des Otages." *Revue des Deux Mondes*, vol. 159 (1900), p. 1.

¹⁶ A list of the official reports of committees, etc., for and against the progressive principle will be found in Stourm, *Bibliographie Historique*, etc., pp. 296 et seq.

¹⁷ Among the chief protests were the following: Jolivet, *Pétition au Conseil des Cinq Cents contre l'Emploi des Progressions dans les Contributions et Emprunts forcés*. An. VII (1798); Saint-Aubin, *Encore quelques Reflexions isolées sur l'Emprunt Forcé*, Paris, n. d.

¹⁸ Vandal, *op. cit.*, p. 11.

ister of Finance, Gaudin, sent in a most unfavorable report containing this scathing passage: "The disastrous system of progressive taxation, so well disguised under the name of forced loan, was bound to produce the double consequence of increasing the depreciation of property by compromising the wealth of the property owners, and of depriving the industrious classes of their means of subsistence, which can no longer be found in their labor when the wealth of the property owner has disappeared. Such has indeed been the result of a law which could not but produce just resentment and from which no real income was to be expected. It is a matter for those who cherish the public credit to bring about the speedy disappearance from our code of a law which only dishonors it."¹⁹

And Thibault for the commission reported in somewhat more measured, but equally unfavorable, terms: "La commission vous propose de mettre un terme aux malheurs publics dont la cotisation progressive admise pour l'emprunt forcé est devenue la source . . . L'expérience et le raisonnement concourent à démontrer que la cotisation progressive produit une foule d'effets nuisibles à la nation qui veut faire usage de cet instrument."

This was for a long time the end of progressive taxation in France, with the exception of a very minor impost on official salaries. The same year which witnessed the

¹⁹ "Le système désastreux de l'impôt progressif, si parfaitement déguisé sous la dénomination de l'emprunt forcé, devait produire le double effet d'ajouter à l'avisement des propriétés en compromettant la fortune des propriétaires, et de priver la classe industrielle des moyens d'existence, qu'elle ne trouve plus dans son travail lorsque l'aisance des propriétaires a disparu. Tel a été en effet, l'unique résultat d'une mesure qui ne pouvait produire que de justes mécontentements et de laquelle on ne devait attendre aucune ressource. Il import au crédit public de faire disparaître promptement au code de notre législation une loi qui le déshonore."

passage of the last forced loan also saw the enactment of a tax on official salaries according to a progressive scale. Salaries of 600 francs were exempt, while:

From	600	to	2000	francs	they	paid	1/10
"	2000	"	3000	"	"	"	1/6
"	3000	"	4000	"	"	"	1/5
Over	4,000	francs	they	paid	1/4.		

This experiment with official salaries was repeated in 1816, and again in 1831. In 1816 the rates varied from 1 per cent in the first class (from 501 to 1,000 francs) up to 30 per cent in the thirty-third class (150,000 to 300,000 francs). In 1831 the rates varied from 2 per cent in the first class (salaries below 2,000 francs), up to 25 per cent in the twenty-fourth class (salaries over 20,000 francs).²⁰

In some of the other countries of the European continent, where the French influence was strong, we notice the growth of a tendency toward the adoption of the progressive principle. Thus in the Helvetic Republic several pamphlets were written in favor of adopting the French theories,²¹ and the experiment itself was actually tried in 1800, although in a much modified form. By the law of that year salaries were taxed at one per cent and two per cent respectively, according to their amount. Similar laws were adopted in the cantons of Lucerne and Schaffhausen.²²

In most of the continental countries, however, the occasional high progressive taxes of this period were due to the extraordinary straits in which the governments found themselves. Thus in Holland, in 1796, the progression was so severe as to become almost a confiscation. The rate of the income tax varied from three per cent to

²⁰ Cf. Vautier, *De l'Impôt Progressif*, 1851, p. 21.

²¹ Cf. the details in Schanz, *Die Steuern der Schweiz*, i, p. 9.

²² *Ibid.*, i, p. III.

thirty-seven and a half per cent. Although this lasted only a year, it was followed in 1798 by a progressive tax, ranging from four to ten per cent; in 1800, from two to seven per cent; and in 1804, from one to twenty per cent.²³ In Austria a "class" tax was imposed in 1799, and continued with a few changes until 1830, dividing incomes into twenty-three classes, with rates varying from two and a half to twenty per cent. In Baden the produce and property tax (*Erwerbs- und Vermögensteuer*) of 1808-1813 taxed incomes at rates varying from one-half of one per cent to six per cent; while in Russia the rate of the extraordinary property tax of 1812 varied from three to five per cent.²⁴ With a few exceptions, however, the principle of progression was not applied to the regular taxes during the first half of the nineteenth century. The one important exception is that of the income tax in England which we shall now proceed to study.

²³ Cf. E. van Voorthuijsen, *De directe Belastingen inzonderheid die op de Inkomsten. Eene staatshuishoudkundige Proeve*, 1848, ii, pp. 193-227.

²⁴ These examples may be found in Parieu, *Histoire des Impôts généraux sur la Propriété et le Revenu*, pp. 152-154. Cf. also his *Traité des Impôts*, i, pp. 442 et seq.

§ 6. *England.*

The scheme of the income tax was first introduced in England by Pitt in 1798, in the Triple Assessment.¹

The arrangement in brief was this: As to the taxpayers who possessed taxable carriages, horses or men servants, the assessment of the previous year, if under £25, was increased three times; from £25-30, three and a half times; from £30-40, four times; from £40-50, four and a half times, and over £50, five times. As to those paying taxes on inhabited houses, windows, dogs, clocks or watches, the assessments of the previous year were altered or diminished as follows:

£1 - 2	¼	£12½-15.....	2½
2 - 3	½	15 -20.....	3
3 - 5	¾	20 -30.....	3½
5 - 7½.....	1	30 -40.....	4
7½-10	1½	40 -50.....	4½
10 -12½.....	2	over 50.....	5

As to those paying taxes on lodgings or shops the assessment was changed as follows:

£3 - 5	¹ / ₁₀	£12½-15.....	¾
5 - 7½.....	⅓	15 -20.....	1
7½-10	¼	20 -25.....	1¼
10 -12½.	½	25 -30.....	1½
		over 30.....	2

The total payment was so arranged that incomes under £60 were exempt, incomes from £60-200 paid from one hundred and twentieth to one-tenth of the respective amounts, *i. e.*, five-sixths of one per cent to ten per cent,

¹ As the statements of Dowell, *History*, etc., ii, p. 220 and iii, p. 87, are very incomplete and partly inexact the official figures are here given as contained in the *First Report from the Select Committee on the Income and Property Tax*, 1852, pp. 1-5, and in the act itself, Statute 38 George II, chap. 16, "The Aid and Contribution Act."

while all incomes over £200 paid ten per cent.² Parents of four to seven, eight to nine, and ten or more children, could claim ten, fifteen and twenty per cent abatement respectively.

When Pitt introduced his general income tax in 1799,³ after the comparative failure of the Triple Assessment, the same arrangement was retained as to the total exemption of £60, as well as to the graduation between £60-200, and the ten per cent rate on all incomes over £200. Minor changes were made in abatements allowed for children. When the general income tax was repealed and the system of schedules introduced in 1803, the system of graduation was somewhat altered.⁴ £60 were free as before; from £60-70 the rate was three pence in the pound, and the rate increased one penny for every additional ten pounds income, until £150 was reached, above which the rate was uniformly one shilling in the pound. In 1805 one-quarter was added to the rates, but the graduation in the smaller incomes still proceeded on the same principle. In 1806, when the rate of the tax was fixed at ten per cent, the limit of total exemption was decreased from £60

² The exact figures were as follows:

On incomes from

	£	60-65	the tax was not to exceed 1/120 of the income.				
		65-70	"	"	"	1/95	" "
		70-75	"	"	"	1/70	" "
		75-80	"	"	"	1/65	" "
and so on to		100-105	"	"	"	1/40	" "
		105-110	"	"	"	1/38	" "
		110-115	"	"	"	1/36	" "
and so on to		150-155	"	"	"	1/20	" "
		155-160	"	"	"	1/19	" "
		160-165	"	"	"	1/18	" "
and so on to over		200	"	"	"	1/10	" "

³ "The Tax on Property and Employments." 39 George III, chap. 13.

⁴ "An Act for granting a Contribution on the Profits arising from Property, Professions, Trades and Offices," 43 George III, chap. 122.

to £50, while the system of abatement was so changed that for every pound income below £150 one shilling tax should be deducted. Thus at

£50	the charge was	100s.	The abatement was	100s.	The tax was	0s.
51	"	"	"	102s.	"	"
52	"	"	"	104s.	"	"
149	"	"	"	298s.	"	"
150	"	"	"	300s.	"	"

Moreover the abatements were limited to incomes from labor, and the allowance for children was abolished, because of the frauds practiced.

The tax was repealed in 1816. When it was reintroduced in 1842 the system of graduation was not adopted, but all incomes below £150 were entirely exempted. In 1853, however, the principle of graduation was again applied, but in a simplified form. The limit of total exemption was changed to £100; on incomes from £100-150 the rate was 5*d.* in the pound; on incomes above £150 it was 7*d.* In 1863 another change was made by which the rate was made the same on all incomes, but with the proviso that incomes below a certain sum should be absolutely exempt, while on incomes up to another limit a definite and unchangeable amount should be deducted. This principle still exists at present, although the figures have been slightly altered. Thus in 1863 £100 were exempt, while on incomes between £100-200 an abatement of £60 was made. In 1873 an abatement of £80 was allowed on incomes under £300. In 1876 the limit of absolute exemption was again raised to £150, while on incomes under £400 an abatement of £120 was made.

In 1894 the abatements and exemptions were again extended. On incomes between £160 and £400 the abatement was raised from £120 to £160, and on incomes between £400 and £500, £100 were now deducted. In

1898 this last abatement was increased to £150, and two new classes were added, so that the arrangement became the following, the limit of complete exemption remaining at £160:

On sums from £160-£400 the abatement is £160						
"	"	"	400- 500	"	"	150
"	"	"	500- 600	"	"	120
"	"	"	600- 700	"	"	70

the full rate being levied only on incomes of over £700.

This is the system enforced at present; but the movement for the adoption of a more general progressive system has attained such proportions that a select committee was recently appointed to consider the whole subject. The committee brought in its report in 1906. It recommended an extension of the limit of abatements to £1000,⁵ but favored leaving the assessment of the tax according to schedules, through stoppage at the source as at present. It stated, however, that on incomes over £5000 it was practicable to introduce a system of general progression by levying what they called a "super-tax" assessed through personal declaration on the income as a whole. The committee also recommended the introduction of the principle of differentiation between earned and unearned

⁵"Graduation of the income tax by an extension of the existing system of abatements is practicable. But it could not be applied to all incomes from the highest to the lowest, with satisfactory results. The limits of prudent extension would be reached when a large increase in the rate of tax to be collected at the source was necessitated, and the total amount which was collected in excess of what was ultimately retained became so large as to cause serious inconvenience to trade and commerce and to individual taxpayers. Those limits would not be exceeded by raising the amount of income on which an abatement would be allowed to £1,000 or even more." *Report from the Select Committee on Income Tax; with the Proceedings of the Committee, 1906, no. 365, page 8, sec. 30, paragraph 1.*

incomes, stating it to be their opinion that this was practicable if limited to earned incomes of not over £3000. In the budget of 1907 the principle of differentiation was accepted, and "earned" incomes up to £2000 henceforth pay only 25 per cent of the full rates. Up to the present time, however, (1908) a super-tax scheme has not been introduced by the government.

In England, therefore, the principle of graduation has been applied to incomes only in the sense of a degressive tax. The general theory is that of proportional taxation, but a slight allowance is made through the system of abatement on the smallest incomes.

At present, outside of the degression in the income tax, graduation is found only in the so-called death duties or inheritance tax. The old probate duty and account duty as changed in 1881 varied from $1\frac{1}{2}$ per cent to 3 per cent, while the estate duty levied in 1889, imposed an additional tax of 1 per cent on successions over £10,000, thus increasing the progressive nature of the charge. In 1894, however, a new estate duty was imposed to replace these three duties. The estate duty was graduated according to the following scale:

Estates.		Rates.
£100 to	300.....	30 sh.
300 "	500.....	50 "
500 "	1,000.....	2%
1,000 "	10,000.....	3%
10,000 "	25,000.....	4%
25,000 "	50,000.....	$4\frac{1}{2}\%$
50,000 "	75,000.....	5%
75,000 "	100,000.....	$5\frac{1}{2}\%$
100,000 "	150,000.....	6%
150,000 "	250,000.....	$6\frac{1}{2}\%$
250,000 "	500,000.....	7%
500,000 "	1,000,000.....	$7\frac{1}{2}\%$
Over	1,000,000.....	8%

In 1901 the estate tax on estates exceeding £150,000 was increased as follows:

£150,000 to	250,000.....	7%		
250,000 "	500,000.....	8%		
500,000 "	750,000.....	9%		
750,000 "	1,000,000.....	10%		
1,000,000 "	1,500,000	10% on first million and	$\left\{ \begin{array}{l} 11\% \\ 12\% \\ 13\% \\ 14\% \\ 15\% \end{array} \right\}$	on re- mainder.
1,500,000 "	2,000,000			
2,000,000 "	2,500,000			
2,500,000 "	3,000,000			
Over 3,000,000.....				

In addition to this estate duty payable on the value of the estate as a whole, collateral heirs are still chargeable with the legacy and succession duty, rising from 3 to 10 per cent according to relationship, and payable on the distributive shares of what remains after the estate duty is paid. The highest actual rate is thus about 23 per cent.⁷

As is pointed out by the Select Committee of 1906 on the income tax, if the income tax and the death duties be regarded together as a form of the taxation of incomes, there is already a very substantial graduation of taxation on incomes derived from large estates, and a differentiation between large incomes derived from personal exertion and those derived from inherited property.⁸

⁷ Cf. for details, West, *The Inheritance Tax*, 2nd ed., 1908, pp. 62-64. *Columbia University Series in History, Economics and Public Law*, vol. iv, no. 2.

⁸ *Report from the Select Committee on the Income Tax*, 1906, p. 8. The application of the progressive principle to the income tax in England had previously been discussed unfavorably by G. H. Blundon, "A Progressive Income Tax," in *The Economic Journal*, v (1895), p. 527.

§ 7. Germany.

In Germany the progressive principle has been introduced in both commonwealth and local finance, first in the income tax, then in the inheritance tax, and finally in the unearned increment taxes.¹

The most important instance was until recently that of the Prussian income tax. Originally instituted in 1820 as a class tax, or species of graduated poll tax, it was divided in 1851 into a class tax and a classified income tax. This latter tax was so arranged that the lowest income in each class paid a rate of three per cent. In 1873 the system was slightly modified, the rate in the class tax varying approximately from three-quarters of one per cent to two and a half per cent, while in the income tax the maximum was still three per cent. Finally, in 1891, the class tax was abolished and the income tax was made somewhat more progressive than the class tax had been. Incomes below 900 marks are exempt; incomes from 900 to 1050 marks pay six marks tax, i. e., 62/100 per cent of the mean. The scale is then so fixed that the rate gradually rises until four per cent is

¹ Cf. in general for the income taxes *Handwörterbuch der Staatswissenschaften*, 3rd ed., 1909, vol. iii, where all the latest details are given. Cf. also Gustav Schmitt, *Systematisch-Kritische Darstellung der zur Zeit in Deutschland und Oesterreich bestehenden allgemeinen Einkommensteuergesetze*, 1900. See also M. v. Heckel, *Die Fortschritte der direkten Besteuerung in den deutschen Staaten*, 1904, and the same author's *Lehrbuch der Finanzwissenschaft*, i, 1907. The most recent and comprehensive account will be found in the authoritative official document entitled *Denkschriftenband zur Begründung des Entwurfs eines Gesetzes betreffend Änderungen im Finanzwesen. Band I, Das Finanzwesen der öffentlichen Körperschaften Deutschlands*, 1908. An account of the German income taxes will also be found in the British blue book, *Reports from his Majesty's Representatives abroad respecting Graduated Income Taxes in Foreign States*. Miscellaneous, no. 2, 1905. Cd. 2587.

reached at an income of 100,000 marks (\$25,000), beyond which point the rate remains the same.² In 1906 an amendment was adopted applicable to limited liability companies. Up to that time corporations had been subject to the same scale of the income tax as individuals; but an income of $3\frac{1}{2}$ per cent on the capital was in all cases exempt. Now this exemption was removed in the case of limited liability companies which are henceforth taxable on their entire income. The rates, however, are somewhat higher, rising according to the scale printed on the next page but one.

While a few of the smaller German commonwealths have a proportional income tax, almost all of the income taxes in the larger states are arranged on the progressive principle, some as in Prussia, with fixed taxes for each class of income, others with fixed rates for each class. In almost every case, however, the number of classes is large, so that the increase of rate is very gradual. In Baden the progressive principle is applied in a peculiar way through what is known as *Steueranschlge*, or taxable valuations. For each class of assessed income only a certain sum is taxable, the amount being only one-fifth of the lowest assessed income in the first class (900–1,000

² From M.	900 to	1,800	the tax increases	3 marks for every 150		
"	1,800 "	4,500	"	5 "	"	300
"	4,500 "	6,500	"	14 "	"	500
"	6,500 "	7,500	"	16 "	"	500
"	7,500 "	9,000	"	20 "	"	500
"	9,000 "	9,500	"	24 "	"	500
"	9,500 "	10,500	"	24 "	"	1,000
"	10,500 "	30,500	"	30 "	"	1,000
"	30,500 "	32,000	"	60 "	"	1,500
"	32,000 "	78,000	"	80 "	"	2,000
"	78,000 "	100,000	"	100 "	"	2,000

Above 1,000,000 marks the tax increases 200 marks for each 5,000. Cf. Kolisch, *Das Einkommensteuergesetz vom 24 Juni, 1891, zum praktischen Gebrauch bearbeitet*, Glogau, 1893.

marks) and gradually increasing until when the income is 25,000 marks, the total assessed income is also the total taxable income. The rate, as fixed every year by law, is then levied on these taxable valuations. This system, it will be recognized, is the same as that formerly practiced in the case of the progressive direct tax in Athens. The income tax was first applied in Bavaria in 1899, and in Würtemberg in 1903; in Baden and Saxony the system is somewhat older, the Saxon law, however, having been amended in 1902, the Baden law in 1900 and again in 1906.

In order to bring out clearly the differences in the methods of graduation, the rates for the important commonwealths which possess a general income tax are appended:

PRUSSIA (1891).

Income, Marks	Tax, Marks	Income, Marks	Tax, Marks
900-1050.....	6	4200- 4500.....	104
1050-1200.....	9	4500- 5000.....	118
1200-1350.....	12	5000- 5500.....	132
1350-1500.....	16	5500- 6000.....	146
1500-1650.....	21	6000- 6500.....	160
1650-1800.....	26	6500- 7000.....	176
1800-2100.....	31	7000- 7500.....	192
2100-2400.....	36	7500- 8000.....	212
2400-2700.....	44	8000- 8500.....	232
2700-3000.....	52	8500- 9000.....	252
3000-3300.....	60	9000- 9500.....	276
3300-3600.....	70	9500-10500.....	300
3600-3900.....	80	10500-11500.....	330
3900-4200.....	92	11500-12500.....	360

and so on.

Up to 30,500.....increase of 30 for every 1000 marks.

" 32,000..... " " 60 " " 1500

" 78,000..... " " 80 " " 2000

" 100,000..... " " 100 " " 3000

From 100,000-105,000 marks the tax is 4,000 marks.

For every additional 5,000 marks the tax is 200 marks more.

The Prussian rate thus begins at .67 per cent. on \$225 and reaches 4 per cent. at \$25,000.

PRUSSIA (1906).

TAX ON LIMITED LIABILITY COMPANIES.

Income, Marks.	Tax, Marks.	Income, Marks.	Tax, Marks.
From			
900-1050.....	7	3000-3300.....	66
1050-1200.....	10	3300-3600.....	76
1200-1350.....	14	3600-3900.....	86
1350-1500.....	18	3900-4200.....	96
1500-1650.....	24	4200-4500.....	112
1650-1800.....	30	4500-5000.....	132
1800-2100.....	36	5000-5500.....	148
2100-2400.....	42	5500-6000.....	164
2400-2700.....	48	6000-6500.....	180
2700-3000.....	56	and so on.	
Up to m. 9,500 the tax increases m. 20 for every 500 marks			
“ 46,500	“	40 “ “	1,000 “
“ 48,000	“	60 “ “	1,500 “
“ 100,000	“	100 “ “	2,000 “

On incomes from m. 100,000 to 104,000 the tax is m. 4600 and increases by m. 180 for every additional m. 4000.³

The rate therefore begins at .78% on \$225, and rises to 4.6% on \$25,000.

BAVARIA (1899).

Income, Marks.	Tax, Marks.	Income, Marks.	Tax, Marks.
0- 500.....	½	4200- 4600.....	40
500- 750.....	1	4600- 5000.....	45
750- 900.....	2	5000- 5500.....	50
900-1050.....	3	5500- 6000.....	57
1050-1200.....	4	6000- 6500.....	64
1200-1400.....	5	6500- 7000.....	72
1400-1600.....	6	7000- 7500.....	80
1600-1800.....	8	7500- 8000.....	90
1800-2000.....	10	8000- 8500.....	100
2000-2200.....	12	8500- 9000.....	112
2200-2400.....	15	9000- 9500.....	124
2400-2700.....	18	9500-10000.....	136
2700-3000.....	22	10000-11000.....	150
3000-3400.....	26	11000-12000.....	165
3400-3800.....	30	12000-13000.....	180
3800-4200.....	35	13000-14000.....	200
and so on.			

³ The new law will be found in Schanz, *Finanz Archiv*, vol. xxiii (1906), pp. 582 *et seq.*

Up to 22,000 an increase of 20 m. for every 1,000 marks

"	34,000	"	"	30	"	"	1,000	"
"	41,000	"	"	40	"	"	1,000	"
"	50,000	"	"	50	"	"	1,000	"

Above 50,000 m. the tax remains at 3%.⁴

WÜRTEMBERG (1903).

The Würtemberg law of 1903 is arranged in 96 classes. As these would be too bulky to print entire, we add only a few of the typical lower classes:

Class.	Income, Marks.	Tax, Marks.
I.....	500- 650.....	2
10.....	1,850- 2,000.....	18
20.....	3,350- 3,500.....	53
30.....	4,850- 5,000.....	121
40.....	6,800- 7,000.....	204
50.....	9,700-10,000.....	340
60.....	14,500-15,000.....	549
70.....	24,000-25,000.....	956
75.....	29,000-30,000.....	1175

Above 30,000 marks the rate of tax is as follows:

76.....	30,000- 35,000.....	4%
80.....	50,000- 55,000.....	4.20%
85.....	90,000-100,000.....	4.45%
90.....	140,000-150,000.....	4.70%
95.....	190,000-200,000.....	4.95%
96.....	200,000 and over.....	5% ⁵

BADEN (1906).

Income, Marks.	Steueranschlag (Valuation) Marks.
900-1000.....	200
1000-1100.....	250
1100-1200.....	300
and so on.	
2000-2100.....	750
2100-2200.....	825
and so on.	
3000-3100.....	1500
3100-3200.....	1600
and so on up to 10,000 marks.	

⁴Details will be found in Schanz, *Finanz Archiv*, xvii (1900), p. 773.

⁵The law is printed in Schanz, *Finanz Archiv*, xxi, (1904), pp. 115 *et seq.*

On incomes from 10,000 to 20,000 m. the first 10,000 m. are valued at 9,000 marks, and every 500 marks additional is valued at the full amount.

On incomes from 20,000 m. to 25,000 m. every 500 m. is valued at the full amount.

On incomes over 25,000 m. every 1,000 m. is valued at the full amount.*

SAXONY (1902).

Income, Marks.	Tax, Marks.	Income, Marks.	Tax, Marks.
400- 500.....	1	3400- 3700.....	90
500- 600.....	2	3700- 4000.....	105
600- 700.....	3	4000- 4300.....	120
700- 800.....	4	4300- 4800.....	140
800- 950.....	7	4800- 5300.....	160
950-1100.....	10	5300- 5800.....	180
1100-1250.....	13	5800- 6300.....	200
1250-1400.....	16	6300- 6800.....	221
1400-1600.....	20	6800- 7300.....	242
1600-1900.....	26	7300- 7800.....	263
1900-2200.....	36	7800- 8300.....	285
2200-2500.....	46	8300- 8800.....	307
2500-2800.....	56	8800- 9400.....	330
2800-3100.....	67	9400-10000.....	354
3100-3400.....	78	10000-11000.....	380
		and so on.	

Up to 20,000 marks the tax rises 40 m. for each 1,000 marks.

" 34,000	"	"	"	"	45	"	"	1,000	"
" 73,000	"	"	"	"	50	"	"	1,000	"
" 100,000	"	"	"	"	60	"	"	1,000	"

Over 100,000 marks the rate remains at 5%.†

The principle of graduation has been applied in Germany also to the local income taxes. In Prussia, for

*The rates in Baden were slightly altered in 1894 and again in 1900 and 1906. For the 1894 rates see Schanz, *Finanz Archiv*, xii, (1895), p. 173. The figures in the text are for the new law of 1906, *Finanz Archiv*, xxiv, (1907), p. 153. For the earlier history see Max Voigtel, *Die direkten Staats- und Gemeindesteuern im Grossherzogtum Baden*, 1903.

†The law of 1902 will be found in full in Schanz, *Finanz Archiv*, xx (1903), pp. 258, 279. The earlier law of 1894 will be found *ibid.* xii, (1895), p. 191.

example, we find such graduated local taxes running up to as high as ten or twelve per cent of the income.⁸

The German state income taxes ought, therefore, really to be called degressive rather than progressive taxes, the normal rate which is usually reached at incomes of 100,000 marks being four per cent in Prussia and Hesse, and five per cent in Saxony and Württemberg. The highest rates in any of the German states are found in the old Hansa towns, where they reach the figure of eight per cent. In these cases, however, it must be remembered that the tax includes local as well as state imposts.

Recent years have witnessed the application of the progressive principle to inheritance taxes also. The movement began in Baden in 1899, spread to Hamburg and Lübeck in 1903, to Bremen in 1904, and to Anhalt and Reuss (younger line) in 1905. In 1906, however, a progressive inheritance tax was adopted for the entire German empire. The basic rates, arranged according to relationship, are as follows:

	Per Cent.
Children and other direct descendants.....	exempt
Parents, brothers and sisters and their children....	4
Grandparents, parents-in-law, step-parents, children-in-law and step-children, grand nephews and nieces and adopted children.....	6
Brothers and sisters of parents and relatives by marriage in the second degree, in collateral lines	8
All other cases	10
Inheritances under 500 marks.....	exempt
And in the case of parents, grandparents and adopted children, 10,000 marks.....	exempt

⁸ Cf. the details for each town during the seventies in Neumann, *Die progressive Einkommensteuer im Staats- und Gemeinde-Haus-halt*, pp. 114-125. For later details see the literature mentioned on p. 46.

	Per Cent.
Over 20,000 marks (or in the first 4% class over 50,000 marks) the rates are increased 1/10 for each further sum, at first of 20,000 or 25,000 marks, and afterwards of 50,000 or 100,000 marks.	
On inheritances over 1,000,000 marks or more the rate is 2½ times the basic rate, making the maximum charge	25%

The progressive rates apply to the entire amount of the inheritance, and not, as in France, only to the respective fractions.⁹ Germany thus now enjoys the distinction of having the highest maximum that is found in any of the leading European countries. In the project presented to the Reichstag at the end of 1908 it is proposed to raise these high figures to a still higher level.

The progressive principle has still more recently been applied in Germany in connection with the tax on the unearned increment, or increased selling value of land (*Wertzuwachssteuer*).¹⁰

The unearned increment tax was introduced in Cologne in 1905, and has now spread to a number of towns, more especially Frankfurt a/M, Dortmund, Essen, Gelsenkirchen, Hanau, Liegnitz, and to some of the suburbs of Leipsic and Berlin. The character of the progressive rates may be illustrated by the system in force in Cologne. The increase of value on which the tax is payable is interpreted to mean the difference between the last price paid for the property at any sale and the present price. To the last price paid, however, are to be added, (a) in the case of unimproved land, interest, not compounded, at the rate

⁹ See Schanz, *Finanz Archiv*, xxiii, (1906), p. 784; also West, *The Inheritance Tax*, 2nd Edition, (1908), pp. 35, 36.

¹⁰ Cf. K. Kumpmann, *Die Wertzuwachssteuer*, 1907; R. Brunhuber, *Die Wertzuwachssteuer*, 1906; A. Wagner, *Zur Rechtfertigung der Zuwachssteuer*, 1906; Boldt, *Die Wertzuwachssteuer*, 1908; Damaschke, *Jahrbuch der Bodenreform*, *passim*; R. C. Brooks, "The New Unearned Increment Taxes in Germany," *Yale Review*, xvi, (1907), pp. 237, *et seq.*

of four per cent from the time of the last sale to the present sale; (b) expenditures incurred for the improvement of the land and costs of new buildings or re-buildings; (c) five per cent of the last price to represent stamp tax, transfer tax, and certain fees. If certain parcels of the whole tract have been sold at a loss, the loss may be deducted provided that the losing sales occurred at the same time as the profitable sales, or within a period of three years previous. With these limitations, the rates are as follows:

An increase of value of 10 per cent or less is exempt.

An increase of value in excess of ten per cent is taxed at the following rates:

Increase of value in excess of 10%.	Tax rate (%).
10-20.....	10
20-30.....	11
30-40.....	12
and so on.	

The rate of tax increases one per cent for each ten per cent increase of value, up to a rate of twenty-five per cent on an increase of value in excess of 160 per cent.

These rates, however, are applied only in case less than five years have elapsed since the last sale. If more than five, and less than ten years have elapsed, only two-thirds of the above rates are applied; if more than ten years, only one-third.

In the other towns, the initial rate and the rate of progression vary considerably. In some cases the minimum rate is only three per cent and in others five per cent. The rate of progression varies from one per cent tax for each ten per cent increase of value, as in Cologne, up to ten per cent tax for each five per cent increase of value. The maximum limits vary still more widely. In Paderborn, Dortmund, Essen and Hanau the highest rate of tax is fifteen per cent in case of an increase of value over 75,

80, 140 and 200 per cent respectively. In Frankfort the maximum is twenty-five per cent tax where the increase of value is over 130 per cent. Gelsenkirchen has the highest maximum with a rate of thirty per cent where the increase in value is over 155 per cent.

The results of this experiment with the progressive taxation of the unearned increment of urban land will be watched with interest. Thus far the yield has been on the whole insignificant.

A study of progressive taxation in Germany would not be complete without reference to the so-called *Staffelsteuern* or graduated taxes on spirituous and malt liquors.¹¹

The tax on alcoholic liquors (*Branntweinsteuer*) became in 1887 an imperial tax on distilleries (*Brennsteuer*) with two separate graduated scales which were merged by the law of 1902 into a single scale. According to this act, the tax begins with a production of 200 hectolitres of pure alcohol when the rate is two marks per hectolitre. From 200 to 400 hectolitres the tax increases by half a mark for every additional 100 hectolitres; above 400 hectolitres it increases by half a mark for every additional 200 hectolitres, until it reaches a maximum of six and a half marks for 1800 hectolitres.

The tax on malt liquors (*Brausteuern*) is not an imperial tax. But apart from the separate beer taxes in Bavaria, Würtemberg and Baden, most of the other German states have formed a North German Union (*Nord-deutsche Brausteuergemeinschaft*) which adopted in 1906 a general law on the subject.¹² According to this act the

¹¹ For a general discussion of these taxes, see Josef Dierschke, *Progressive Besteuerung des Grossbetriebes bei einigen Verbrauchssteuern*, 1903, and Clément Charpentier, *La Progression dans les Impôts Indirects en Allemagne*, 1908.

¹² See especially E. Struve, *Zur Frage der Brausteuersaffelung in der nord-deutschen Brausteuergemeinschaft*, 1906.

tax is graduated according to the amount of raw materials employed. Breweries using during the fiscal period 250 metric quintals or less, pay 4 marks. Above that limit the tax is as follows:

Quintals	Tax per Hectolitre, in marks
250- 500.....	4.50
500-1,000.....	5.00
1,000-2,000.....	5.50
2,000-3,000.....	6.22
3,000-4,000.....	7.00
4,000-5,000.....	8.00
5,000-6,000.....	9.00
Over 6,000.....	10.00

In Bavaria, according to the law of 1888, the general rate is six marks per hectolitre. But breweries using less than 6,000 hectolitres of malt pay only five marks per hectolitre for the first 2,000. If they use more than 10,000 hectolitres the rate increases by a quarter of a mark per hectolitre for the next 30,000 hectolitres, and by half a mark per hectolitre for everything above 40,000 hectolitres.

In Würtemberg graduation was introduced in 1893. In 1900 the rates were changed as follows: The normal tax is five marks per quintal of malt used. Up to 1000 quintals, however, the tax is fixed at 70 per cent of the normal rate, for the next 1000 quintals at 80 per cent, for the next 3000 quintals at 100 per cent, for the next 4000 quintals at 110 per cent, for the next 10,000 quintals at 120 per cent.

In Baden the progressive rate dates from 1896. For a production up to 1500 quintals of malt the tax is eight marks for the first 250 quintals, and 10 marks for the remainder; from 1500 to 5000 quintals the rate is eleven marks, and above 5000 quintals the tax is twelve marks.

The system of graduation was also applied in Germany to the sugar tax in 1896. But as a consequence of the

abolition of sugar bounties by the Brussels Convention the entire system of sugar taxes was abandoned in 1903.

It will be seen from the above that the German system of progressive indirect taxes on liquors has for its object the desire to protect the small producer against the competition of his larger rival. Much the same end was sought to be achieved by the progressive tax on department stores (*Waarenhaussteuer*), which is found in several of the German states, and which is graduated according to the amount of sales (*Umsatzsteuer*).

In Prussia this tax dates from 1900. The tax begins at the rate of one per cent, when the sales amount to 400,000 marks, and increases slowly until it reaches two per cent at 1,000,000 marks. In Bavaria, according to the law of 1899 the range of the tax is greater, varying from one-half of one per cent to three per cent. In Baden, according to the law of 1904, the graduation is considerably more marked. The rate begins at two per mill for sales of 200,000 marks, and increases one per mill for each succeeding 200,000 marks up to 1,000,000 marks. Above that the rate increases one per mill for each successive 100,000 marks until it reaches ten per cent.¹³ The protection of the small shop keeper, which was the avowed aim of this progressive tax, in pursuance of the famous middle-class policy (*Mittelstandspolitik*), has, however, not been achieved.¹⁴

¹³ For details of the various German laws see v. Heckel, *Lehrbuch der Finanzwissenschaft*, i, 1907, pp. 306-308.

¹⁴ Cf. Hans Gehrig, *Die Waarenhaussteuer in Preussen: ein Beitrag zur Mittelstandspolitik*, 1905. Dr. Gehrig declares the tax to have been a complete failure, and sees in the entire episode only another instance of the futility of seeking to check by government measures, and especially by any system of taxation, a natural economic evolution.

§ 8. *Austria.*

In Austria the income tax is levied partly on the progressive principle. The tax dates from 1849, but has been somewhat amended several times since, especially in 1868. According to the law of that date there were several schedules, to each of which a different rate of progression was applicable. The first schedule included incomes from business already subjected to the business tax; the second schedule comprised other incomes from personal exertions; the third schedule included incomes from loans, etc. In the first schedule the tax was originally a proportional tax of five per cent, but the successive amendments imposed additional increments on certain classes, while adding smaller increments to other classes. The result was a progressive scale. In the case of certain associations and corporations falling within this schedule the progression was very rapid, ranging from two and a half to almost ten per cent. The law¹ declared that when the income exceeded three hundred gulden, the first additional thousand gulden should be assessed at three-tenths of the amount, the second thou-

¹ Thus :

Income, Gulden.	Assessment, Gulden.	Tax Rate, per cent.	Tax, Gulden.	Rate of Income per cent.
1,000.....	300.....	8.5.....	25.5.....	2.55
2,000.....	800.....	10.....	80.....	4
3,000.....	1,800.....	10.....	180.....	6
4,000.....	2,800.....	10.....	280.....	7
6,000.....	4,800.....	10.....	480.....	8
8,000.....	6,800.....	10.....	680.....	8.5
12,000.....	10,800.....	10.....	1,080.....	9
30,000.....	28,800.....	10.....	2,880.....	9.6
100,000.....	98,800.....	10.....	9,880.....	9.88
1,000,000.....	998,800.....	10.....	99,880.....	9.988

Cf. E. von Fürth, Die Einkommensteuer in Oesterreich und ihre Reform, 1892, p. 46.

sand gulden at five-tenths, and the remainder at its full value.

In the second schedule the progressive principle was introduced already in 1849. From 630 to 1,050 gulden (600 to 1,000, old standard) the rate was one per cent, then rising one per cent for each 1,050 (old standard, 1,000) gulden until a maximum of ten per cent was reached. Owing to certain additions (*Zuschläge*), which varied from seventy to one hundred per cent in the different classes, the rates were from one and seven-tenths per cent to almost twenty per cent of the income.² This seems an extravagantly high rate. In the third sched-

² The exact figures are:

	Income, Gulden.	Tax, Gulden.	Rate, per cent.
Under	630.....	0	0
	630.....	10.71.....	1.7
	1,050.....	17.85.....	1.7
	1,275.....	25.52.....	2
	1,995.....	49.98.....	2.5
	2,100.....	63	3
	3,150.....	126	4
	4,200.....	210	5
	5,250.....	315	6
	6,300.....	441	7
	7,350.....	588	8
	8,500.....	756	9
	9,450.....	945	10
	10,500.....	1,155	11
	12,600.....	1,575	12.5
	15,750.....	2,205	14
	18,900.....	2,835	15
	23,625.....	3,780	16
	31,500.....	5,355	17
	47,250.....	8,505	18
	94,500.....	17,955	19
	1,050,000.....	209,055	19.91
	10,500,000.....	2,099,055	19.991

Cf. Fürth, op. cit., p. 47.

ule, there was not so much a progression as a differentiation of the tax.

In 1896 the system was again changed. The third schedule of the income tax was abolished and was converted into an independent tax on the income of capital (*Kapitalrentensteuer*) with the rates from one and one-half to ten per cent. The other two schedules were consolidated into a general income and salary tax (*Personaleinkommen- und Besoldungssteuer*), arranged according to a graduated scale. Incomes under 48,000 florins are arranged in sixty-five classes. Typical classes, with the tax thereon, are as follows:

Class.	Income, florins.	Tax, florins.
1.....	600- 625.....	3.60
10.....	950- 1,000.....	9.20
20.....	1,900- 2,000.....	30
30.....	4,200- 4,600.....	101
40.....	9,000- 9,500.....	272
50.....	18,000-19,000.....	670
60.....	36,000-38,000.....	1,390
65.....	46,000-48,000.....	1,860

and so on.

Up to 100,000 florins there is an increase of 100 fl. for every 2,000. From 100,000 to 105,000 fl. the tax is 4650 fl. On incomes over 105,000 fl. there is an increase of 250 fl. for every 5,000 fl.: that is, at the rate of five per cent.⁸

There is a supplementary tax on higher salaries, beginning at the rate of 0.4 per cent on salaries of 3,200 fl. and rising to 6 per cent on salaries over 15,000 fl.

The progressive scheme has also been applied to inheritance taxes for local purposes. Thus in lower Aus-

⁸ Schanz, *Finanz Archiv*, xiv (1897), p. 167. See also R. Sieghart, "The Reform of Direct Taxation in Austria," *Economic Journal*, viii (1898), p. 173.

tria and in Vienna we find light progressive inheritance taxes imposed for special purposes. In lower Austria it is a school tax, beginning at one-quarter of one per cent for sums under 1,000 fl., and in Vienna it is levied for the hospital fund.⁴

⁴*Journal for the Society of Comparative Legislation*, vol. v, p. 26.

§ 9. Switzerland.

More interesting, because more distinctly due to the growth of democratic impulses, are the progressive income and property taxes in Switzerland.¹ Here progressive taxation is of recent date. It is indeed true that after the revolutionary movements of 1830 and 1848, when the Swiss were beginning to realize the inadequacy of the general property tax and were endeavoring to supplement it with an income tax derived from other sources than property, the income tax was made degressive, generally sharply degressive. This was the case in Zürich in 1832, where on incomes below eight thousand francs the rate descended from two and a half per cent to one-

¹ An article by Prof. Gustave Cohn, "Income and Property Taxes in Switzerland," in *Political Science Quarterly*, iv (1889), p. 37, draws some general conclusions from the experience of Zurich. The article by Mr. R. H. Inglis Palgrave, "Progressive Taxation as levied in Switzerland," in *Journal of the Royal Statistical Society*, li (1888), p. 225, deals especially with the cantons of Baselstadt, Vaud and Uri. The English blue book *Report on the different Systems of Graduated Taxation in force in Switzerland*, (1892), deals with five cantons only: Vaud, Zürich, Geneva, Grisons and Uri. The later report of 1905 on graduated income taxes, quoted above, p. 46, includes all the cantons. For complete and detailed information for the whole of Switzerland students must turn to Georg Schanz, *Die Steuern der Schweiz in ihrer Entwicklung seit Beginn des 19 Jahrhunderts*, five volumes (1890). Vol. i gives a general survey in pages 110-114, and the tables of progression for each canton in pages 367-379, while the details of the development will be found in volumes ii, iii and iv, and the laws themselves in vol. v. In the *Quarterly Journal of Economics*, i, 225, may be found the text of the law of 1886, imposing the progressive property tax in the canton of Vaud. A good account may also be found in Max de Cérenville, *Les Impôts en Suisse*, 1898. In the interval between Schanz and Cérenville there were but few important changes in the progressive taxes. Since 1898 the changes have been still fewer. Cf. also the semi-official work of Dr. J. Steiger, *Grundsätze des Finanzhaushaltes der Kantone und Gemeinden*. Herausgegeben unter Mitwirkung des eidgenössischen statistischen Bureaus und Kantonalen Behörden. Bern, 1903.

fiftieth of one per cent.² The same is true of St. Gallen in 1832, of Zug in 1848, of Thurgau in 1849, and many others. Some of the official commissions during these years recommended progressive taxes for the higher incomes, as well as the extension of the graduated principle to the property tax. The public, however, was not yet prepared for this. In fact, in a few cases the degression in the income tax was again abolished, as in Zug in 1851, and in Schaffhausen in 1862. The only exception to the statement that graduation was not applied to property is Baselstadt, where the income tax of 1840 was extended to the income from property as well, and where the rate varied from one-half of one per cent to three per cent for incomes over six thousand francs.³ The high progressive property tax in Neuenberg (Neuchâtel) in 1848, where the rate varied from one per cent on 1,000-3,000 francs property to ten per cent on property over 500,000 francs, was an extraordinary measure and was not repeated.⁴

The real impetus to progressive taxation was given by the Zürich law of 1870, which applied the progressive scale to property as well as to income. During the seventies Graubünden (Grisons), Glarus, Obwalden, Zug and Schaffhausen adopted the plan; during the eighties Aargau, Uri, Vaud; during the nineties Appenzell, Basel-land, Baselstadt, Lucerne and Solothurn followed. To-day progressive taxation of property or income is found in twenty of the twenty-five cantons, while the progressive inheritance tax is found in nine cantons, progressive taxation of some kind existing in twenty-one out of the twenty-five cantons.

The system of progressive taxes on property or income in Switzerland may be classified into three groups:

I. The cantons with a proportional property tax, but

² Schanz, *op. cit.*, ii, p. 389.

³ *Ibid.*, ii, p. 35.

⁴ *Ibid.*, iv, p. 50.

a progressive income tax. These are Bern, Freiburg, Obwalden, St. Gallen, Thurgau and Ticino. The rate of the property tax is the same, but the rate of the income tax varies from zero (in St. Gallen seven hundred francs income are entirely exempt), by slow gradations to over four per cent. The laws fix, not the rate of the tax, but the amount of the tax to be paid for each class of income.⁵

2. The cantons with a progressive property tax. These are Geneva and Glarus. In Geneva the *taxe mobilière* applies only to personalty. If the property does not exceed 50,000 francs, the first 3,000 francs pay nothing, the remainder pays one per mill; if the property is between 50,000 and 250,000 francs, the first 50,000 francs pay forty-seven francs, and the rest two per mill; if the property exceeds 250,000 francs, the charges are as in the preceding case, except that the surplus over 250,000 francs pays three per mill. In Glarus the general property tax is so arranged that on property less than 25,000 francs, the assessment is only sixty per cent of the true value, while on property above 100,000 francs an addition is made to the rate, ranging from one-tenth of one per cent to two per cent in the case of four million francs property.⁶

3. The cantons with progressive property and income taxes. Most of the cantons with a property tax levy an income tax only on so-called earned income; *i. e.*, income not derived from property. But Baselstadt and Baselland levy the income tax on incomes from property as well. Baselland, however, excepts interest on monied capital from the income tax.⁷ The progressive rates are much more sharply graduated in the income tax than in the property tax. For instance, in Baselstadt the rate

⁵ Schanz, *op. cit.*, v, pp. 309, 325, 353.

⁶ *Ibid.*, iii, p. 85.

⁷ *Ibid.*, i, p. 55.

of the property tax is one, one and a half and two per cent, according as the property is below 100,000, between 100,000-200,000, or over 200,000 francs. The income tax is one per cent on incomes to 4,000 francs; two per cent on the excess to 8,000 francs; three per cent on the excess to 12,000 francs, and four per cent on the remainder. Concessions are made for unmarried persons, and parents with small children for incomes from 1,200-2,400 francs. Calculating the property on a four per cent income basis, and including the additions levied for communal purposes, the rate of the entire property and income tax, when the income is derived from property, varies from less than two per cent up to nine and eight-tenths per cent of the income.⁸ In other cantons the rate of progression is smaller.

So far as the technical methods of carrying out the progressive principle are concerned, the Swiss cantons may be divided into four classes. The first class pursues the old Athenian plan, which in lieu of changing the rate assesses to the tax not the whole, but only varying proportions of the true property or income. Thus in Zürich,

In the property tax 5/10 of the first 20,000 francs are assessed.

6/10	"	next	30,000	"	"
7/10	"	"	50,000	"	"
8/10	"	"	100,000	"	"
9/10	"	"	200,000	"	"
10/10	"	"	remainder	"	"

In the income tax 2/10 of the first 1,500 francs are assessed.

4/10	"	next	1,500	"	"
6/10	"	"	3,000	"	"
8/10	"	"	4,000	"	"
10/10	"	"	remainder	"	"

Every one hundred francs income pays two francs, as often as every thousand francs property pays one franc. The same is virtually true in Freiburg.

⁸ Cf. the table in Bücher, *Basel's Staatseinnahmen*, p. 82, and Schanz, *op. cit.*, i, p. 379.

The second class follows the plan of capitalizing the income at different rates. Thus in Solothurn⁹ where both an income tax and a property tax exist, incomes above one thousand francs are considered as equivalent to property of ten times the amount; but incomes from—

900-1000 francs are deemed to correspond to 8,000 francs property.									
800- 900	"	"	"	"	"	6,000	"	"	
700- 800	"	"	"	"	"	4,500	"	"	
600- 700	"	"	"	"	"	3,000	"	"	
500- 600	"	"	"	"	"	2,000	"	"	
400- 500	"	"	"	"	"	1,000	"	"	
300- 400	"	"	"	"	"	400	"	"	

Incomes below 300 francs are deemed to correspond to property of the same amounts.

In the third and fourth classes, which comprise the large majority of the cantons, the laws either prescribe a definite sum or rate to be paid by each class, or alter the rate for each class of property or income. Most of the cantons charge a fixed rate upon the entire property or income, according to the class in which it falls. But a few cantons, like Basel, Zug, Schaffhausen, Aargau and Vaud, divide the entire property or income, so that each successive portion or increment pays the rate assigned to that particular amount of the property or income.¹⁰ In order to ascertain the tax on the entire sum, it thus becomes necessary to make a series of arduous computations and additions. Geneva follows the same plan for its property tax, as does Ticino for its income tax.

A peculiar feature of the Swiss taxes is that the progressive rate is applied separately to the income tax and to the property tax. A taxpayer with 2,500 francs income from property and 2,500 francs income from labor

⁹ Schanz, *op. cit.*, ii, p. 457.

¹⁰ *Ibid.*, i, p. 113.

will be assessed separately for each, and will pay less than if he had 5,000 francs income, either from property alone or from labor alone. Only two cantons have attempted to apply the progressive system to the whole income, irrespective of the source. They accomplish this by adding a certain percentage, not to the taxable property or income, but to the amount of the tax, figured on a proportional taxation of property and income. Thus in Aargau, every one who is assessed at from 40-70 francs tax must pay five per cent additional, from 70-100 francs tax ten per cent additional, and so on, until those who are assessed at over 500 francs tax must pay thirty-three per cent additional. So in Schaffhausen, those assessed at 25-50 francs pay five per cent additional, and so on until those assessed at over 500 francs tax pay fifty per cent additional. This plan possesses at least the advantage of simplicity. In most of the cantons the rate is determined for each assessment by the Grand Council, with a maximum rate which may not be exceeded without reference to popular vote. But in Basel, Geneva and Vaud the rates are fixed in the law itself.

For the sake of completeness the rates of progression in each of the sixteen cantons are herewith appended in the following tables, the figures after the name of the canton signifying the year in which the law now in force was enacted:

AARGAU.—(ARGOVIE.)—1885.

PROPERTY AND INCOME TAX.

If normal tax varies from				40- 70 fr.	an addition is made of 5%		
"	"	"	"	"	70-100	"	" 10%
"	"	"	"	"	100-200	"	" 15%
"	"	"	"	"	200-300	"	" 20%
"	"	"	"	"	300-400	"	" 25%
"	"	"	"	"	400-500	"	" 30%
If the normal tax is over 500 fr.				an addition is made of 33⅓%			

APPENZELL A. RH.—(RHODES EXTÉRIEURS.)—1897.

PROPERTY TAX.

Property.	Rate.
1- 10,000 fr.	Simple rate, generally 1%
10,001- 20,000	1.05
20,001- 50,000	1.10
50,001-100,000	1.15
100,001-200,000	1.20
Over 200,000	1.25

INCOME TAX.

Up to 2,000 fr. income the rate is 1/10 of 1%.

From 2,000 to 10,000 fr. income the rate rises 1/10 of 1% for every one thousand francs.

At 10,000 fr. income the rate is 1%.

BASELLAND.—(BALE-CAMPAGNE.)—1892.

PROPERTY TAX.

Property.	Rate.
From 1,000- 30,000 fr.	Simple rate, generally 1%.
" 30,001- 60,000	Addition of 1/10 for each 15,000 fr.
" 60,001-100,000	" " 1/10 " " 20,000 "
" 100,001-300,000	" " 1/10 " " 25,000 "
" 300,001-400,000	" " 1/10 " " 50,000 "

Above 400,000 fr. the rate is 2½ times the simple rate.

INCOME TAX.

Income.	Rate.
500- 700 fr.	½ the simple rate.
701- 900	¾ the simple rate.
901- 3,000	Simple rate.
3,001- 5,000	20% increase for each 500 fr.
5,001- 6,000	20% increase for each 1,000 fr.
6,001-12,000	30% increase for each 1,000 fr.
Over 12,000	3 times the simple rate.

BASELSTADT.—(BALE-VILLE).—1897.

PROPERTY TAX.

Property.	Rate.
Up to 50,000 fr.....	1%
50,000-100,000.....	1½%
100,000-200,000.....	2%
Over 200,000.....	3%

INCOME TAX.

Income.	Rate.
Up to 4,000 fr.....	1%
On surplus to 8,000.....	2%
On surplus to 12,000.....	3%
On surplus to 16,000.....	4%
On excess over 16,000.....	5%

BERN.—1865.

INCOME TAX.

Income.	Rate per cent		
	Capital.	Pensions, etc.	Other Income
Each 50-100 fr.....	2½	2	1½
" 150-200.....	5	4	3
" 250-300.....	7½	6	4½
" 350-400.....	10	8	6
" 450-500.....	12½	10	7½
etc., etc.		etc., etc.	

FREIBURG.—(FRIBOURG.)—1848.

INCOME TAX.

If the income does not exceed 1,500 fr., 5/10 are exempted.
 If the income does not exceed 5,000 fr., 4/10 are exempted.
 If the income exceeds 5,000 fr., 3/10 are exempted.

GENEVA.—1887.

PERSONAL PROPERTY TAX.

Property.	Rate
Up to 50,000 fr.....	0 on first 3,000, 1/10 of 1 per cent on excess.
50,000-250,000....	47 fr. on first 50,000, 2/10 of 1 per cent on excess.
Over 250,000. {	47 fr. on first 50,000, 2/10 of 1 per cent on excess
	up to 250,000, and 3/10 of 1 per cent on excess.

GLARUS.—(GLARIS.)—1891.

PROPERTY TAX.

Property.	Rate.	Property.	Rate.
Under 25,000 fr. {	60 per cent of assessment.	400,001- 500,000	7/10 additional.
		500,001- 600,000	8/10 "
25,000-100,000 {	60 per cent of assessment	600,001- 700,000	9/10 "
		700,001- 800,000	10/10 "
	for first 25,000; full	800,001- 900,000	11/10 "
	rate for	900,001-1,000,000	12/10 "
	remainder.	1,000,001-1,250,000	13/10 "
100,001-150,000	1/10 additional.	1,250,001-1,500,000	14/10 "
150,001-200,000	2/10 "	1,500,001-1,750,000	15/10 "
200,001-250,000	3/10 "	1,750,001-2,000,000	16/10 "
250,001-300,000	4/10 "	2,000,001-2,500,000	17/10 "
300,001-350,000	6/10 "	2,500,001-3,000,000	18/10 "
350,001-400,000	6/10 "	3,000,001-3,500,000	19/10 "
		3,500,001-4,000,000	20/10 "

GRAUBÜNDEN.—(GRISONS.)—1881.

PROPERTY AND INCOME TAX.

PROPERTY TAX.

Property.		Rate.
1- 20,000 fr.....	pay.....full.	
20,001- 50,000.....	"	1/10 addition for each 1,000 fr.
50,001- 80,000.....	"	2/10 " " " " "
80,001-110,000.....	"	3/10 " " " " "
110,001-140,000.....	"	4/10 " " " " "
140,001-170,000.....	"	5/10 " " " " "
170,001-200,000.....	"	6/10 " " " " "
200,001-230,000.....	"	7/10 " " " " "
230,001-260,000.....	"	8/10 " " " " "
260,001-290,000.....	"	9/10 " " " " "
290,001-320,000		
and over.....	"	10/10 " " " " "

INCOME TAX.

Income.	Rate. Per cent.	Income.	Rate. Per cent.
1-800 fr.....	¼	5,000-5,500 fr.....	3
800-1,500.....	½	5,500-6,000.....	3½
1,500-2,000.....	1	6,000-6,500.....	4
2,000-3,000.....	1½	6,500-7,000.....	4½
3,000-4,000.....	2	7,000-12,000.....	5
4,000-5,000.....	2½	Over 12,000.....	5½

LUCERNE.—1892.

PROPERTY TAX.

INCOME TAX.

Property.	Rate.	Income.	Rate.
From 1,000 to 100,000 fr..	1.5 %	From 1,000 to 30,000 fr..	1½ %
From 100,001 to 1,000,000		From 30,001 to 84,000 fr.	
rate raised by 1/10 of		rate raised 1/10 of 1 %	
1 % for every 100,000 fr.		for every 6,000 fr.	
Over 1,000,000 fr.....	2½ %	Over 84,000 fr.....	2½ %

These taxes are levied every two years, so that the annual rates are only one-half as large.

OBWALDEN.—(UNTERWALDEN-LE-HAUT.)—1870.

INCOME TAX.

Income.	Tax in fr.	Income	Tax in fr.
500 fr.....	0.50	800 fr.....	1.20
600	0.70	900	1.50
700	1.	1,000	2.

From 1,000-2,900 fr. ½ of 1 per cent.

Over 3,000 fr. 1 per cent.

The above rates are payable for each $\frac{1}{2}$ of 1 per cent levied as property tax. In the last two classes 400 fr. may be deducted.

ST. GALLEN.—(ST. GALL.)—1863.

INCOME TAX.

For each 1 per mill of property.

Income.	Tax.	Income.	Tax.
800- 999 francs.....	1 fr.	5,500- 5,999.....	63 fr.
1,000-1,499.....	2	6,000- 6,499.....	76
1,500-1,999.....	4	6,500- 6,999.....	90
2,000-2,499.....	7	7,000- 7,499.....	105
2,500-2,999.....	11	7,500- 7,999.....	121
3,000-3,499.....	16	8,000- 8,499.....	138
3,500-3,999.....	22	8,500- 8,999.....	157
4,000-4,499.....	30	9,000- 9,499.....	177
4,500-4,999.....	40	9,500-10,000.....	200
5,000-5,499.....	51	Over 10,000.....	2½ per ct.

SCHAFFHAUSEN.—(SCHAFFHOUSE.)—1879.

PROPERTY AND INCOME TAX.

	Francs.		Per cent.
When the tax varies from	26- 50	an addition is made of	5
"	51- 75	"	10
"	76-100	"	15
"	101-150	"	20
"	151-200	"	25
"	201-250	"	30
"	251-300	"	35
"	301-400	"	40
"	401-500	"	45
	Over 500	"	50

SOLOTHURN.—(SOLEURE.)—1895.

PROPERTY AND INCOME TAX.

PROPERTY TAX.

The rate is $\frac{1}{2}$ of 1%.

When tax is under 20 fr. the addition is 0

"	"	20- 30	"	"	"	10%
"	"	30- 40	"	"	"	20%
"	"	40-140	"	"	"	10% for each 20 fr. tax.
"	"	140-200	"	"	"	10% " " 30 " "
"	"	over 200	"	"	"	tax is doubled.

INCOME TAX.

The rate is 1%. The progression is as in the property tax.

THURGAU.—(THURGOVIE.)—1849.

INCOME TAX.

Income.	Tax in fr.	Income.	Tax in fr.
Under 200 fr.....	0.35	1,101-1,400.....	6
201- 400.....	0.55	1,401-1,700.....	10
401- 600.....	1.	1,701-2,000.....	16
601- 800.....	2.	2,001-2,300.....	23
801-1,100.....	4.	2,301-2,600.....	30

Over 2,600, 1½ fr. for every hundred fr.

TICINO.—(TESSIN.)—1864.

INCOME TAX.

	For the first	Francs	For excess. Per cent.
From 400- 800 fr.....	400.....	1.....	¾
" 801- 1,200.....	800.....	2.....	¾
" 1,201- 2,000.....	1,200.....	4.....	¾
" 2,001- 3,000.....	2,000.....	10.....	1
" 3,001- 5,000.....	3,000.....	20.....	1½
" 5,001-10,000.....	5,000.....	50.....	2
" 10,001-20,000.....	10,000.....	150.....	3
" 20,001-40,000.....	20,000.....	450.....	4
Over 40,000.....	40,000.....	1,250.....	5

URI.—1886.

PROPERTY AND INCOME TAX.

Property.	Tax.	Income.	Tax.
2,000- 30,000 fr..	.50 fr. per 1,000	Up to 1,000 fr..	.25 fr. per 1,000
30,001- 50,000....	.60	1,001- 2,000....	.35
50,001- 80,000....	.70	2,001- 3,000....	.45
80,001-100,000....	.80	3,001- 4,000....	.60
100,001-150,000....	.90	4,001- 5,000....	.80
150,001-200,000....	1.00	5,001- 6,000....	1.00
200,001-250,000....	1.10	6,001- 7,000....	1.20
250,001-300,000....	1.20	7,001- 8,000....	1.40
300,001-350,000....	1.30	8,001- 9,000....	1.60
350,001-400,000....	1.40	9,001-10,000....	1.80
Over 400,000....	1.50	Over 10,000....	2.00

VAUD.—(WAADT.)—1886.

PROPERTY AND INCOME TAX.

Personal Property.	Rate Per Cent.	Real Property	Rate Per Cent.	Income.	Rate Per Cent.
1- 25,000 fr..	1	1- 25,000 fr..	1	1- 1,250 fr..	1
25,001- 50,000....	1½	25,001-100,000....	1½	1,251- 2,500....	1½
50,001-100,000....	2	over 100,000....	2	2,501- 5,000....	2
100,001-200,000....	2½			5,000-10,000....	2½
200,001-400,000....	3			10,001-20,000....	3
400,001-800,000....	3½			20,001-40,000....	3½
Over 800,000....	4			Over 40,000....	4

ZUG.—1896.

PROPERTY TAX.

Property from 1,000–100,000 francs pays the simple rate. Above 100,000 francs, the property is put in classes of 100,000 francs each, so arranged that in each class every 1,000 francs pays $\frac{1}{4}$ franc more than in the preceding class. Thus—

if	100,000	francs..	pay..	1	franc per 1,000 francs.
then	101,000–200,000	" ..	" ..	$1\frac{1}{4}$	" "
"	201,000–300,000	" ..	" ..	$1\frac{1}{2}$	" "
"	301,000–400,000	" ..	" ..	$1\frac{3}{4}$	" "
"	over 400,000	" ..	" ..	2	" "

INCOME TAX.

If the rate of the property tax is one per mill,

Income.	Tax.
1– 500 francs.....	pay.....1 franc per 100 francs.
500–1,000 francs.....	pay..... $1\frac{1}{4}$ francs per 100 francs.
1,000–7,000 francs.....	rate increases 25 centimes per each 1,000 fr.
Over 7,000 francs.....	pay.....3 francs per 100 francs.

ZURICH.—1870.

PROPERTY AND INCOME TAX.

Property.

Of the first 20,000 francs.....	$\frac{5}{10}$	are assessed.
" next 30,000 "	$\frac{6}{10}$	"
" " 50,000 "	$\frac{7}{10}$	"
" " 100,000 "	$\frac{8}{10}$	"
" " 200,000 "	$\frac{9}{10}$	"

Of the surplus.....the whole is assessed.

Income.

Of the first 1,500 francs.....	$\frac{2}{10}$	are assessed.
" next 1,500 "	$\frac{4}{10}$	"
" " 3,000 "	$\frac{6}{10}$	"
" " 4,000 "	$\frac{8}{10}$	"

Of the surplusthe whole is assessed.

It is evident from these tables that there is a great diversity in the practical application of the progressive system to property and income taxes in Switzerland. Some cantons apply it to local taxes, others declare that local taxation should be proportional; some have a slight graduation, others a sharp progression; some apply it to one tax only, others to both taxes. In no two cantons are the rates or the classification identical. The following table shows the rate of progression in various cantons:

INCOME TAX (ON LABOR INCOMES).

Canton.	Rate of Tax on Income of					Rate of tax on 100,000 fr. is great- er than that on 10,000 fr. by	Rate of tax on 1,000,000 fr. is great- er than that on 100,000 fr. by
	10,000 fr.	20,000 fr.	40,000 fr.	100,000 fr.	1,000,000 fr.		
Freiburg	1.75	2.1	2.1	2.45	2.45	1.4 times	1.4 times
Bern	1.2	2.1	2.55	2.82	2.98	2.35 "	2.48 "
Obwald	0.12	0.24	0.34	0.5	0.59	4.17 "	4.92 "
Zug	0.4	1.05	1.7	2.82	2.98	7.05 "	7.45 "
Zurich	0.8	1.2	2.4	4.4	7.63	5.5 "	9.04 "
Vaud	0.29	0.63	1.13	1.81	3.44	6.24 "	11.86 "
Graubünden ..	0.6	1.05	2.28	5.91	10.47	9.85 "	17.45 "
Uri	0.0075	0.23	0.49	1.07	1.98	22.27 "	26.4 "
GENERAL INCOME TAXES.							
Baselland	0.5	0.5	0.7	1.6	2.	3.6 "	4.0 "
Solothurn	0.2	0.46	0.69	0.98	1.4	4.9 "	7. "
Ticino	0.6	1.4	2.5	5.	11.8	8.3 "	27.3 "
Baselstadt		0.6	1.	1.8	4.6		

Some cantons exempt a minimum of subsistence, some pursue the policy of abatements and allowances, some tax all property or income but according to different rates. Some cantons levy a fixed poll tax while others levy a graduated poll tax, the amount of the tax increasing with the progression in the property and income taxes. Whatever the minor differences, however, the tendency is everywhere toward the spread of the progressive principle and the increase of the scale of progression. The constitutional provision in some of the cantons that the progression should be a "moderate" one, is of little use in view of the elasticity of the term "moderate." As an actual fact, the highest rates do not generally exceed four or five per cent of the income, but in a few cantons like Glarus, Uri, Vaud and Baselstadt the rates are as high as six, seven and even ten per cent. That the number of persons assessed at the higher rates is very small is indeed true; and it may also be concluded

that the yield of the progressive taxes is in general very little more than would be the yield of simple proportional taxes. The opponents, however, of the progressive principle, like Leroy-Beaulieu, forget that it is the function of progressive taxation not so much to obtain increased revenues as to apportion the burden more equably among the taxpayers. If the progressive tax is more just than the proportional tax, the fact that it would not yield a penny more revenue would in itself constitute no valid objection.

A more serious practical objection is the tendency to produce evasion, fraud or exodus of capital. It is questionable, however, whether this objection has not been somewhat exaggerated. The danger is undoubtedly a real one, but there is actually far more evasion, fraud and exodus of capital under the system of the proportional property tax in America than under the system of the progressive property and income taxes in Switzerland. Those who will defraud the government or abandon their home because of tax rates are apt to do so at all events, provided the tax is high enough; and it has yet to be proved that a moderate progression will of itself bring about such baneful results. Certainly the experience of Switzerland seems to point in the other direction. Statistics of evasion or exodus of capital are unattainable or worthless; but in all the important cantons which practice progressive taxation, there has been a steady increase in the total valuation of property and income.¹¹

The very spread of the progressive system in recent years shows at all events that the Swiss cantons have not yet begun to experience any of the injurious consequences

¹¹ In Zürich, *e. g.*, the assessed property had increased between 1870-1899 from 627 to 906 million francs, the assessed income from 43 to 88 millions. Schanz, ii, p. 416. Similar figures might be given for the other cantons, which practice the progressive system. Cf. Cérenville, *op. cit.*, pp. 175-181

which have been predicted for the last few decades. In those very cantons where the opposition was at first the loudest, the satisfaction is now general. There is no question of abandoning the vantage ground already won. As Switzerland is the most democratic country in Europe, so is it also the most striking example of the progressive system.

Furthermore, in addition to the general property and income taxes, almost all the Swiss cantons levy inheritance taxes, which are progressive in nine cases.¹² In Baselland the rates are increased one-tenth in each class until amounts in excess of 400,000 fr. pay two and one-half times the normal rate. In Bern on any excess above 50,000 francs the rate is increased one-half. In Glarus and Zug the rates increase by arithmetical progression, the additional increments never exceeding one per cent in Glarus and two per cent in Zug. In Solothurn the basic rates of three to twelve per cent, arranged according to relationship, apply to inheritances between 100 and 5,000 francs; below 100 francs only half the rate is applied; from 5,000–20,000 francs the rates are increased by one-fourth for every 5,000 francs. In Thurgau inheritances over 6,350 francs pay one-fourth more; over 12,700 francs one-half more; over 19,000 francs three-fourths more; over 25,000 double rates. In Zürich the rate increases one-tenth for each 10,000 francs until it becomes half as large again as the regular rate. In Uri the rate increases one-tenth for each 10,000 francs up to 200,000 francs, so that the tax on 200,000 francs would be triple the original rate. As the basic rates vary from one per cent for brothers and sisters to twenty-five per cent for distant relatives, this means that the maximum

¹²Cf. the details in Schanz, *op. cit.*, i, p. 158, and later details in West, *The Inheritance Tax*, 2d ed., 1908, pp. 42–44. Cf. also Cérinville, *op. cit.*, p. 215.

rate is seventy-five per cent, the highest figure to be found in any country. This rate applies, however, only to intestate successions, and as wealthy people do not usually die intestate, the law is really only a paper enactment. As a matter of fact, the maximum rate has never been enforced. In Schaffhausen the rates increase one-tenth for inheritances between 2,000 and 10,000 francs and one-tenth for each additional 10,000 francs up to 90,000 francs. Above that sum inheritances pay double rates.

In the following tables will be found the rates of the inheritance tax in the principal cantons.¹³

	Near relatives per cent.	More dist. relatives per cent.	Most dist. relatives per cent.	Strangers per cent.	Max. rates applicable on sums exceeding
Bern	1 1½	2.... 6	6.... 9	10.... 15	fr. 10,000
Glaris	½.... 4	4.... 8	6.... 12	10.... 20	100,000
St. Gall	½.... 6	4.... 12	6.... 18	10.... 30	
Solothurn	3 6	9.... 18	10½.. 21	10.... 24	4,000
Schaffhausen .	2 4	4.... 8	6 .. 12	10.... 20	18,000
Thurgau	2 4	3.... 8	5 .. 10	6.... 12	5,000
Uri	1½.... 6	2.... 6	3 .. 9	25.... 75	40,000
Zug	½.... 2½	1.... 3	2.... 4	8.... 10	20,000
Zurich	2 3	6.... 9	10.... 15	10.... 15	10,000

¹³ Compiled from Schanz, *Die Steuern der Schweiz*, i, pp. 155-160.

§ 10. *Holland.*

In Holland, up to 1892, the only example of progressive taxation for state purposes was a poll tax levied according to a graduated scale upon furniture, valuables, horses and mortgages. In 1892 and 1893 there was introduced a progressive system in a new combination of the property and income tax.¹ The arrangement for progressive rates is as follows:

Property under 13,000 florins is practically exempt; from 13,000 to 14,000 fl. the tax is 2 fl.; from 14,000 to 15,000 fl. it is 4 fl. If the property exceeds 15,000 fl. but is less than 200,000 fl., the tax is 1.25 per mill for the surplus over 10,000 fl. Property of 200,000 fl. would therefore be taxed 237½ fl. For every 1,000 fl. above 200,000 fl. there is an additional tax of 2 fl. In other words, there is a deduction in all cases for a certain part of the property (10,000 fl.); there is a complete exemption for a minimum of subsistence (13,000 fl.), and an abatement for a somewhat larger amount (15,000 fl.); and finally there is a slightly progressive rate. For if income on property is reckoned as four per cent, the property tax of 1.25 per mill (on sums below 200,000 fl.) equals an income tax of three and one-eighth per cent; while a property tax of two per cent (on sums above 200,000 fl.) equals an income tax of five per cent. Owing to the deduction of 10,000 fl., as well as to the complete exemption of 13,000 fl. and the abatements for 13,000 fl. and 14,000 fl., the property tax computed as an income tax would vary from zero to almost five per cent. This will be seen from the following table:

¹ For details as to the discussions leading up to this tax, see Seligman, *Essays in Taxation*, 5th ed., 1905, pp. 322-330; and also E. M. Bossevain, in Schanz, *Finanz Archiv*, vol. xi, (1894), pp. 419-746, *et seq.*

Property fl.	Tax fl.	Amount Per Mill	Percentage of Income
12,000	0.	0.	0.
13,000	2.	0.15	0.37
14,000	4.	0.29	0.72
15,000	6.25	0.41	1.02
20,000	12.50	0.62	1.55
25,000	18.75	0.75	1.87
50,000	50.00	1.00	2.50
100,000	112.50	1.12	2.80
150,000	175.00	1.17	2.92
200,000	237.50	1.19	2.97
210,000	257.50	1.23	3.07
220,000	277.50	1.26	3.15
250,000	337.50	1.35	3.37
500,000	837.50	1.67	4.19
1,000,000	1,837.50	1.84	4.59
3,000,000	5,837.50	1.95	4.86
5,000,000	9,837.50	1.97	4.92
10,000,000	19,837.50	1.98	4.96
20,000,000	39,837.50	1.99	4.98

In the income tax it was proposed to observe the same principle of graduation, but the rate was to be less. Since 200,000 fl. are equivalent to 8,000 fl. income, the original plan was to tax incomes from labor above a certain minimum two per cent up to 8,000 fl., and three and one-fifth per cent above that, instead of the three and one-eighth per cent and five per cent rates of the property tax. That is, incomes from labor were to be taxed three-eighths less than incomes from property. It was decided, however, to make the minimum of subsistence higher in the income tax than in the property tax; partly because of the existence of indirect taxes, partly for other reasons. The consequence was the necessity of two schedules in the income tax, one for incomes from labor alone, and one for the incomes of taxpayers already subjected to the property tax. In the former case the tax is levied only on the surplus above 650 fl.; but as the property tax is levied only on the surplus above 10,000 fl. (which corresponds to an income of 400 fl.), the tax on incomes from property

is levied on the surplus above 250 fl. (or the difference between 650 fl. and 400 fl.). The higher rate, therefore, begins in this case not with 8,000 fl. (as in the case of labor incomes), but with 8,200 fl. This would result in the following schedules; which, although seemingly complicated, are the results of simple computations:

Schedule A Incomes from labor income		Schedule B (for those liable also to the property tax)			
Tax (In florins)		When property amounts to 13,000 fl. or 14,000 fl.		When property varies between 15,000 fl. and 200,000 fl.	
		Income	Tax (In florins)	Income	Tax (In florins)
650- 700.....	1.	250- 300.....	2.	250- 300.....	1.25
700- 750.....	2.	300- 350.....	2.75	300- 350.....	2.
750- 800.....	2.75	350- 400.....	3.50	350- 400.....	2.75
800- 850.....	3.50	400- 450.....	4.25	400- 450.....	3.75
850- 900.....	4.25	450- 500.....	5.	450- 500.....	4.25
900- 950.....	5.	500- 550.....	5.75	500- 550.....	5.
950-1000.....	5.75	550- 600.....	6.50	550- 600.....	5.75
1000-1050.....	6.50	600- 650.....	7.25	600- 650.....	6.50
1050-1100.....	7.25	650- 700.....	8.	650- 700.....	7.25
1100-1150.....	8.	700- 750.....	8.75	700- 750.....	8.
1150-1200.....	8.75	750- 800.....	9.50	750- 800.....	8.75
1200-1250.....	9.50	800- 850.....	10.25	800- 850.....	9.50
1250-1300.....	10.25	850- 900.....	11.	850- 900.....	10.25
1300-1350.....	11.	900- 950.....	11.75	900- 950.....	11.
1350-1400.....	11.75	950-1000.....	12.50	950-1000.....	11.75
1400-1450.....	12.50	1000-1050.....	13.25	1000-1050.....	12.50
1450-1500.....	13.25	1050-1150.....	14.	1050-1100.....	13.25
1500-1600.....	14.	Over 1050.....	14 +	1100-1200.....	14.
1600-8200.....	14 +	2 florins for every		Over 1100.....	14 +

2 per cent on surplus over 1500 fl.

Over 8200 fl., 148 fl.
+ 3.20 per cent. on surplus over 8200 fl.

hundred florins on surplus over 1050 fl.

But if the income, together with 4 per cent. on the taxable property, exceeds 8150 fl., a tax of 1.20 per cent. is payable on the excess.

2 florins for every hundred florins on surplus over 1100 fl.

But if the income, together with 4 per cent. on the taxable property, exceeds 8200 fl., a tax of 1.20 per cent. is payable on the excess.

When property exceeds 200,000 fl., the tax is 3.20 on every hundred florins income over 200 fl.²

²For a discussion of certain changes which are being suggested

The progressive principle has also been applied to the local income tax in Holland. Commencing with the year 1851 the communes were given a rather wide latitude in matters of taxation. In 1865, however, the communal excises were abolished and several years later the local share in the commonwealth poll tax was restricted. This led the local bodies to seek a compensation in the imposition of an income tax, and especially in the poorer provinces, like Groningen and Friesland, the progressive principle was welcomed. The graduation was frequently very marked. For instance, in Amsterdam the incomes were divided into five classes; in the first two classes the incomes were taxed on one-quarter of the assessed valuation; in the next two classes on one-half and in the next class on three-quarters of the assessed valuation. Moreover, in considering the assessed valuation the minimum of each class was taken as the basis. It is the Athenian and the Zürich plan with a slight alteration. In the town of Terneuzen, on the other hand, where the number of the classes is much larger, the rate itself varied—the first class, from 300-399 florins, paying one-half of one per cent tax; the second class, from 400-549 florins, five-eighths of one per cent, and thus gradually increasing until the nineteenth class, with incomes of 7,000 florins and over, paid four per cent.⁸

The system of progression was pushed to such an extreme, however, that it led to a reaction. After much discussion the law of 1897 was enacted, which virtually prohibited any departure from proportional taxation, with the exception that an amount representing the minimum

in the present system of progressive taxation in Holland, see an article by N. G. Pierson, "The Income Tax in Holland," *Economic Journal*, xvii (1907), p. 417.

⁸Denis, *L'Impôt sur le Revenu. Rapports et Documents présentés au . . . Conseil Communal de Bruxelles* (1881), p. 45.

of subsistence might be exempted in all cases, and with a further exception, which can best be put in the words of the law itself:

"In levying a capitation or other direct income tax, no revenue may be left out of calculation, nor be calculated or estimated under their real amount, except in so far as in the case of variable incomes a mean value out of two or more years may be computed.

"The amount of the tax must be the same percentage for all incomes, after deduction from all incomes of a sum necessary for livelihood, equal for all incomes or varying only according to the construction of the family. Deviation from this rule is permitted if existing regulations or special circumstances make such deviation desirable, and on condition that the distribution of charges do not vary considerably from that which would be obtained by adhering to the said rule.⁴

In 1900, however, the liberals, who had been responsible for the general legislation of 1892, returned to power, and the rigor of the prohibition of 1897 was somewhat relaxed, without, however, restoring to the localities the complete freedom which they had previously enjoyed in the matter of progressive scales. The latitude which the localities now enjoy, however, has been sufficient to prevent any serious complaint on either side.

⁴ See the article by A. J. Cohen-Stuart, "Progressive Taxation in Holland," *Economic Journal*, viii (1898), pp. 328-332.

§ 11. *Denmark, Sweden and Norway.*

In Denmark and Sweden the progressive principle has been accepted to a certain extent. In the Scandinavian countries it has been introduced only recently. In Denmark the law of 1903 imposed, for general state purposes, an income tax with a supplementary property tax. The property tax is proportional at the rate of 0.6 per mill. The income tax is progressive at the following rates:¹

Income (Kroner)	Rate (%)	Income (Kroner)	Rate (%)
Under 2,000.....	1.3	15,000- 20,000.....	2.
2,000- 3,000.....	1.4	20,000- 30,000.....	2.1
3,000- 4,000.....	1.5	30,000- 40,000.....	2.2
4,000- 6,000.....	1.6	40,000- 50,000.....	2.3
6,000- 8,000.....	1.7	50,000-100,000.....	2.4
8,000-10,000.....	1.8	100,000 or over.....	2.5
10,000-15,000.....	1.9		

The interesting feature of the Danish income tax is that the minimum exemption varies with the character of the district. In Copenhagen the exemption is 800 kroner, in market towns it is 700 kroner, and in rural districts only 400 kroner. In the case of the local income taxes, which are somewhat older, however, there is no exemption at all.²

In Sweden the law of 1897, amended in 1902, imposes a progressive income tax for general state purposes. The arrangement is as follows: Incomes below 1,000 kroner

¹ See *Reports from His Majesty's Representatives abroad respecting Graduated Income Taxes in Foreign States*, 1905, English Blue Book, Command Papers 2587, pp. 100 et seq.

² Cf. *Report on the Danish System of Taxation*, Foreign Office, Misc. Series, 1907, no. 659. For the earlier rates in some of the local income taxes, see the U. S. *Consular Reports on Taxation*, nos. 99-100 (1888), p. 326.

(\$275), are exempt; incomes from 1,000 to 4,000 kroner are taxed on only a portion of the full amount according to a progressive scale; from 4,000 to 6,100 kroner they are taxed on the full amount; above 6,100 kroner they are taxed on more than the actual amount, according to an ascending scale up to a maximum of 145,500 kroner, which sum is assessed as equivalent to 582,000 kroner, *i. e.*, four times the real income. The normal rate of the tax is one per cent on the assessed income, so that the highest actual rate would be four per cent.³

In Sweden there is also a progressive income tax; but this is rather in the nature of a system of progressive fees than a real tax.

In Norway we find both a progressive income tax and a progressive inheritance tax. The income tax is graduated according to the following scale:

Incomes	rate
1000 kroner.....	exempt
1000- 4000 kroner.....	2%
4000- 7000 " 	3%
7000-10000 " 	4%
Over 10000 " 	5%

Up to 4,000 kroner only a part of the income is taxable, varying according to the number of persons dependent on the tax payer. Over 4,000 kroner an exemption of from 600 to 1,800 kroner is allowed, varying according to the number of dependent persons.

The supplementary property tax, known as the *Formneskat*, is not progressive, being at the rate of one-third of one per mill. There are, however, also local income taxes.⁴ Finally, it must be mentioned that the Nor-

³ *Reports from His Majesty's Representatives abroad respecting Graduated Income Taxes in Foreign States*, 1905, p. 116. The exact scale will be found on pp. 118-119.

⁴ *Op. cit.*, pp. 121-122.

wegian inheritance tax law of 1905 imposed rates rising from one per cent to four per cent in the case of children, and reaching ten per cent in the case of distant relatives.⁵

⁵ Schanz, *Finanz Archiv*, xxiv, (1907), p. 194.

§ 12. France.

After the sad experience with the forced loans at the end of the eighteenth century, the history of which has been recounted above, nothing more is heard of progressive taxation in France until the Revolution of 1848. Early in that year the provisional government adopted a declaration that the tax system ought to aim at a more equitable distribution of the burdens.¹ A little later in the same year the government issued a decree stating that in order to bring about really equitable taxation, the progressive principle ought to be adopted.² Oddly enough, however, although this proposition was framed by the Minister of Finance, Garnier-Pagès, who repeated the assertion later, the taxes that were actually imposed were all proportional. A few months subsequently the new Minister of Finance, Godchaux, proposed a progressive inheritance tax.³ But this also failed of adoption, largely owing to the objection of de Parieu, the chairman of the committee.⁴

Until recently, the chief instance of progressive taxation in France was to be found in the rental or occupancy tax paid by the tenant. It is a curious provision of the French system of local taxation, recalling the mediæval

¹ "Que le système de taxe de la République Française doit avoir pour objet une répartition plus équitable des contributions publiques."—Decree of Feb. 29.

² "Avant la Révolution, l'impôt était proportionnel, donc il était injuste. Pour être réellement équitable, l'impôt doit être progressif."—Decree of April 20th. For the fiscal history of the revolution see Du Puynode, *L'Administration des Finances en 1848-1849*, (1849), pp. 65-78.

³ David, "Du Projet de Décret relatif à l'Établissement d'un Impôt Progressif sur les Successions." *Journal des Economistes*, 1848, p. 25.

⁴ For his views, see below, Part II. Cf. also Vautier, *L'Impôt Progressif*, p. 9; and De Retz de Serviez, *op. cit.*, pp. 118-125.

English *firma burgi*, that according to a law of 1846 the *taxe personnelle et mobilière* might be assumed in a lump sum by the cities, and that the amount might be defrayed in part out of the proceeds of the *octroi* or local customs duties. The remainder was to be raised by a tax on rentals, which was made progressive, partly for the reason, already mentioned, that the greater the income the smaller relatively is the amount spent for house rent,⁵ partly in order to compensate the lowest classes for the burdens of the *octroi*, which they were deemed in great part to bear. Several of the French towns adopted this plan. The houses were arranged in classes according to the rental value. Below a certain figure they were entirely exempt. In the other classes the rate was graduated up to a definite maximum. In Paris the progression ended very soon. Houses with rentals below 500 francs were entirely exempt (with some minor exceptions). In the other classes the rate was fixed differently every year according to the needs of the city treasury. In 1890, houses with rentals up to 599 francs paid 6½ per cent, to 699 francs 7½ per cent, to 799 francs 8½ per cent, to 899 francs 9½ per cent, to 999 francs 10½ per cent, to 1099 francs 11½ per cent, and above 1100 francs 11.72 per cent.⁶ In 1888 a bill was introduced by the government generalizing this tax and greatly ex-

⁵ See above, p. 28.

⁶ The rate for the last class varied from year to year, according to the *centimes additionels*. The figure in the text is for the year 1891. In 1892 it was 12.04% and in 1893 12.23%. See Stourm, *Systemes Généraux d'Impôts*, 1893, p. 230. Cf. *Dictionnaire des Finances*, by Léon Say, ii, p. 854, *sub verbo* "Personnelle-mobilière." The figures and statements contained in Wagner, *Finanzwissenschaft*, iii, p. 461, which are copied in the article by Heckel in the *Handwörterbuch der Staatswissenschaften*, iv, (1892), p. 1182, are incorrect. They are all based on antiquated material. Formerly many towns pursued this practice. In 1890 only Paris and Versailles remained.

tending the progression as well as the classification. But it was abandoned.

In 1900, when the *octroi* on certain drinks was suppressed, Paris abandoned the progressive scale; but the law permitted the introduction of a slightly less progressive tax. Rentals under 500 francs were to be exempt, and on rentals above this figure the "assessable rental" (*loyer matriciel*) was to be reached by deducting from the actual rental a sum which, however, could never exceed 375 francs. That is, in the case of a small rental of say 750 francs, one-half was deducted; while in the case of a rental of say 3,750 francs, only one-tenth was deducted. The law of 1903 authorized all departmental capitals and all communes of over 5,000 population to adopt this system, leaving the figures, however, to be fixed by them. The law of 1904 engrafted on this principle another, designed to reduce the tax in the case of large families. The deduction might be increased one-tenth for every dependent person⁷ after the first, provided that the total deduction did not exceed double the minimum rental. This is the rule now in force in Paris and in several other cities.⁸

Since 1901 France has also a progressive inheritance tax. In that year the tax, which until then had been graduated only according to relationship, was graduated according to the amount of the inheritance as well, and

⁷ Dependent persons (*personnes à la charge du contribuable*) are defined to be "enfants ayant moins de 16 ans revolus, les ascendants âgés ou infirmes, les enfants orphelins ou abandonnés et par lui recueillis."

⁸ Cf. E. Allix, *Traité Élémentaire de Sciences des Finances et de la Législation Financière Française*, pp. 384-5; Boucard et Jèze, *Éléments de la Science des Finances et de la Législation Financière Française*, 2nd ed., (1902), ii, pp. 895 et seq.; and *Cours Élémentaire de Science des Finances et de Législation Financière Française*, (1904), pp. 345 et seq.

was arranged in eight classes, the highest class representing inheritances of over 1,000,000 francs. In 1902, five additional classes, with higher rates, were added; the highest class now representing inheritances of over 50,000,000 francs. The minimum and maximum rates are as follows:

Relationship	First Class Up to 2000 fr.	13th Class Over 50,000,000 fr
Direct line	1%	5%
Husband or wife.....	3.75	9
Brothers and sisters.....	8.50	14
Uncles and aunts, nephews and nieces	10	15.50
Grand uncles and grand aunts, grand nephews and grand nieces, and cousins german	12	17.50
Relatives of the 5th and 6th degree	14	19.50
Relatives beyond the 6th de- gree and strangers in blood	15	20.50 ^a

For the sake of completeness, it might be added that in a few of the schedules of the *impôt des patentes* or business tax we find a slight graduation in the scale, according to the number of employees, the amount of the transaction, etc. But the graduation is so slight that it deserves only a mere mention.

On the other hand, the income tax projects, which are being so hotly discussed in France at present, contain some interesting progressive features, but at this date (1908) none of the bills has yet been enacted into law.¹⁰

^a For details, see West, *The Inheritance Tax*, 2nd ed. (1908), pp. 25-26; Boucard et Jèze, *Cours Élémentaire*, 1904, pp. 328 et seq.

¹⁰ The best survey of the recent projects will be found in Gaston-Gros, *L'Impôt sur le Revenu*, 1908. Cf. also *Revue de Science et de Législation Financière*, 1903, p. 522; 1904, p. 509; 1907, p. 407; 1908, *passim*.

§ 13. *Italy.*

In Italy the progressive principle is found in the case of both the income tax and the inheritance tax.

The income tax was introduced in 1864. It was amended several times, but it was not until 1894 that the principles of graduation as well as of differentiation were introduced. The tax is divided into five classes, according to the nature of the income. The differentiation is effected not by making a change in the rate of the tax, but by assessing to the tax different proportions of the true value. The scheme is as follows:

Nature of Income	Amount assessed	Rate of tax on full income
A. Interest on capital owned by estates, etc..	Full rate	20%
B. Interest on private capital.....	30/40	15%
C. Mixed incomes from capital and labor....	20/40	10%
D. Labor incomes	18/40	9%
E. Salaries and pensions	15/40	7½%

The graduation is accomplished in the following way:

Incomes below 400 lire (\$80) are exempt.

In schedules B and C, incomes from 400 to 800 lire (\$80 to \$160) are subject to abatement as follows:

Income	Abatement
400-500 lire.....	250 lire
500-600 "	200 "
600-700 "	150 "
700-800 "	100 "

In schedule D incomes not exceeding 500 lire enjoy an abatement of 100 lire.¹

The Italian income tax, although the chief type of the modern system of differentiation, is therefore an example only of slight degression.

¹ The account of the abatements given in the English blue book mentioned above, p. 46, is not quite accurate.

The progressive principle has also been applied to the Italian inheritance tax since 1902. The tax is arranged in seven classes, the lowest class beginning at 300 lire and the highest class including sums of over 1,000,000 lire. In the case of the direct line the rate varies from eight-tenths of one per cent to three and six-tenths of one per cent, growing with the degree of relationship, until in the case of relatives beyond the sixth degree and strangers in blood, the maximum rate in the seventh class reaches twenty-two per cent. The rates apply only to the representative fractions of the inheritance.²

² West, *The Inheritance Tax*, 2nd ed., (1908), p. 51.

§ 14. *Australasia.*

Recent years have seen a great development in the application of the principle of progression in Australasia. It was there applied first to the inheritance tax, but it has spread of late to other forms of taxation as well, more especially to the land tax and the income tax.

(a) *Inheritance Taxes.*

We find a graduated inheritance tax in Victoria as early as 1870; but in most of the other colonies the progressive principle was introduced much later. In Victoria the law of 1892 divided inheritances into thirty-seven classes, with £1,000,000 as a maximum, and with rates from one to ten per cent. In New South Wales the law of 1885 introduced five classes with £50,000 as a maximum, and with rates of from one to five per cent; but in 1891 New South Wales adopted, with a few minor changes, the scale of duties then in force in Victoria. In Queensland, since the law of 1892, there are six classes, with £20,000 as a maximum, and with rates from one to ten per cent. In South Australia the law of 1893 adopted a rather complex progressive scale, with rates varying from one and one-half per cent on inheritances below £500 or £700 respectively, for near relatives, and rising to ten per cent on inheritances of over £200,000. In Tasmania, since 1904 the rate varies from two to ten per cent for direct heirs, and from four to ten per cent for collaterals. In New Zealand the law of 1881 imposed a tax arranged in nine classes, with rates as on the next page:

2%	on the first.....	£1,000
3	" " next	4,000
4	" " second	5,000
5	" " third	5,000
6	" " fourth	5,000
7	" " third	10,000
8	" " fourth	10,000
9	" " fifth	10,000
10	" " excess above.....	50,000

In 1885 the classes were diminished in number, but the rates were augmented, so that on inheritances up to £1,000 the first £100 paid nothing, and the remainder paid two and one-half per cent; while inheritances between £1,000 and £5,000 paid three and one-half per cent; those from £5,000 to £20,000, seven per cent; and inheritances of £20,000 or over, ten per cent. In several instances strangers in the blood are taxed more severely. In New Zealand, for example, in the case of strangers the graduation extends to thirteen per cent of the inheritance, and in Queensland to twenty per cent.¹

The chief provisions of the Australasian inheritance tax are reproduced in the following table:²

	Amount exempted	Near relatives	Distant relatives	Strangers	Maximum rate applica- ble to sums exceeding
New South Wales. £1,000		1- 5%	2-10%	2-10%	£100,000
Victoria	1,000	1- 5%	2-10%	2-10%	100,000
South Australia....	500	1½-10%	1½-10%	1½-10%	(See note)
Queensland	200	1- 5%	2-10%	4-20%	20,000
West Australia....	1,500	½- 5%	1-10%	1-10%	100,000
Tasmania	200	2- 6%	2- 6%	2- 6%	500
New Zealand (1904)	100	1½- 5%	2½-10%	2½-10%	20,000

£200,000 for near relatives and £20,000 for distant relatives.

¹ The laws themselves, with full details, will be found in two English White Books on *Graduated Income Taxes in the Colonies*, 1905, Colonial Office, nos. 196 and 282. See also West, *The Inheritance Tax*, 2nd ed. (1908), pp. 66-76. Cf. Coghlan, *Statistical Account of Australia and New Zealand*, published annually, and the new *Official Year Book of the Commonwealth of Australia*, published for the first time in 1908.

² Compiled from Coghlan, *Statistical Account of Australia and New Zealand*, 1904.

(b) *Land Taxes.*

Australasia is not only remarkable for possessing the highest graduated inheritance taxes in the world, but it also had, at least up to the year 1908, the distinction of containing the only Anglo-Saxon state which has applied the progressive principle to the property tax. The democratic jealousy of large estates, which is responsible for this movement, was first illustrated in the Victorian land tax.

The Victorian law was enacted in 1877. All estates over 640 acres in size and valued at over £2,500, are taxed one and one-quarter per cent on the capital value after deducting £2,500. The valuation, however, is on a pastoral basis, according to the sheep-growing capacity, irrespective of the value of the land for dairy or agricultural purposes. In this sense the tax may be said to be slightly progressive. The rates are as follows:³

Class	Growing sheep per acre	Value per acre
I.....	2 or more.....	£4
II.....	1 ½	3
III.....	1	2
IV.....	Under one.....	1

In New South Wales the law of 1895, which is still in force, imposed a proportional tax of one per cent on the unimproved value of the land. In the other colonies, however, the tax is graduated.

In South Australia the law was enacted originally in 1884; but the progressive principle was introduced later. At present the tax on unimproved value of the land is ½d. in the pound, with an additional tax of ½d. per pound for the unimproved value of the land in excess of £5,000.⁴ In the case of absentees who have been away from the

³ See the *Victorian Year Book*, 1905, p. 138.

⁴ Coghlan, *Statistical Account of Australia and New Zealand*, 1904, p. 677.

state more than one year, twenty per cent additional is imposed.

In Tasmania the graduated land tax was introduced in 1902. The rates are as follows:

1/2 d. in the £ on the unimproved value under £ 5,000	
5/8 d. " " " " " " £ 5,000-15,000	
3/4 d. " " " " " " 15,000-40,000	
7/8 d. " " " " " " 40,000-80,000	
1 d. " " " " " " 80,000 and over	

There is also a deduction of 1/8d. in the pound for mortgages.⁵

It is, however, in New Zealand that we find the most interesting application of the progressive principle to the land tax. By the New Zealand "land and income assessment act" of September 8, 1891, land was divided into fourteen classes. Up to £5,000 value the ordinary penny rate in the pound was levied; for each successive class an additional one-eighth of a penny was imposed, until when the property exceeded £210,000 in value it paid two and three-quarters pence in the pound.⁶ In the case of absentees (those absent from, or resident out of, the colony for three years or over) the scale of taxation was increased twenty per cent in each case. A distinction was drawn between the land proper and im-

⁵ Coghlan, *op. cit.*, pp. 680, 681.

⁶ The rates additional to the normal penny rate were as follows:

Property.	Addition.	Property.	Addition.
£ 5,000-10,000.....	1/8 d.	£ 90,000-110,000.....	1 d.
10,000-20,000.....	2/8	110,000-130,000.....	1 1/8
20,000-30,000.....	3/8	130,000-150,000.....	1 2/8
30,000-40,000.....	4/8	150,000-170,000.....	1 3/8
40,000-50,000.....	5/8	170,000-190,000.....	1 4/8
50,000-70,000.....	6/8	190,000-210,000.....	1 5/8
70,000-90,000.....	7/8	210,000 and over....	1 6/8

For further details and for the purposes of the measure, see the article on "Direct Taxation in New Zealand," by Sir Robert Stout, in the *Sydney Quarterly*, March, 1892. Cf. also C. Dilke, *Problems of Greater Britain*, i, p. 229.

provements. In the case of the ordinary penny rate, improvements up to £3,000 were exempt, and the amount of any outstanding mortgage was deducted, the mortgage being assessed to the mortgagee. When the value of the land, less such improvements and mortgages, did not exceed £1500, an exemption of £500 was allowed, after which the amount of the exemption diminished one pound for every two pounds increase in the assessed value of the land, so as to leave no exemption when the value exceeded £2,500. An important feature of the law was that the graduated system applied only to the unimproved value of the land. As to improvements, the tax was proportional. It is further to be noted that while in the case of the penny rate a deduction was made for mortgages on the land, no such deduction was made in the case of land upon which a graduated tax was payable, in so far as such graduated tax is concerned. Mortgagees, moreover, were never liable to the graduated tax.

In 1903 the graduated land tax was increased to three per cent and on the lower class the rate was reduced. The scale now rose from 1/16d. to 3d. The rates were as follows:

From £5,000–	7,000	the rate was	1/16d.				
7,000–	15,000	“	rises	1/16d.	for each	£2,000	
15,000–	30,000	“	“	1/16d.	“	“	2,500
30,000–	210,000+	“	“	1/16d.	“	“	5,000

reaching 3d. at £210,000, and remaining at that figure, *i. e.*, one and one-quarter per cent. Absentees, who were now declared to be those absent from the state for at least one year, were taxed fifty per cent additional.⁷

In 1907 the rates were further increased. Up to £40,000 the old rates were continued, the rate on land of £40,000 to £41,000 unimproved value being eight s. per

⁷ See details in Coghlan, *A Statistical Account of Australia and New Zealand*, 1904, p. 686.

£100 (or what is equivalent to two-fifths of one per cent) ; for every additional £1,000 the rate is augmented by one-fifth of a shilling, the rate reaching a maximum at £200,000, when it amounts to £2 per £100, i. e., two per cent. After 1910, however, the new progressive scale on land over £40,000 is to be increased by twenty-five per cent in the case of all land other than "business premises," so that the maximum rate will be two and one-half per cent in place of the original one and three-fourths per cent. This is in addition to the one per cent proportional land tax. Moreover, absentees are now taxed fifty per cent higher, and are now defined as all those who have not been personally present for at least one-half of the period of four years immediately preceding the year of assessment.⁸

In 1907 the land tax, both proportional and graduated, yielded only £147,342, or less than five and one-half per cent of the total revenue.⁹

(c) *Income Taxes.*

In addition to the progressive inheritance tax and progressive land tax, we also find in Australasia progressive income taxes.

Victoria first imposed an income tax in 1895 for three years. £200 were uniformly exempted except in the case of absentees. In the case of incomes from personal exertion, the progressive rates were fixed as follows :

- 4d. in the pound on the first £1000 over the exemption.
- 6d. " " " " " next 1000 " " "
- 8d. " " " " " all incomes over £2200.

⁸ For details see *New Zealand Official Year Book*, 1907, p. 642. For the earlier history of the land tax, see the article "Taxation of Land Values in Australasia," *The Economic Journal*, xiv (1904), p. 401.

⁹ *New Zealand Official Year Book*, 1907, p. 510.

On incomes from property the rates were doubled. The scale of progression was changed in 1903, in 1904, and again in 1905. The 1905 scale, in the case of incomes from personal exertion is as follows:

3d.	in the pound	up to £500
4d.	" " "	500 to 1000
5d.	" " "	1000 to 1500
6d.	on incomes over 1500	

In the case of property incomes, however, double rates are assessed. The minimum amount taxable is £157, there being an exemption of £100 on incomes between £157 and £500.¹⁰

In Queensland the income tax law of 1902 was amended in 1904 so as to provide for the following rates:

On incomes from personal exertion, £100 are exempt.

Incomes from £100 to 125 pay a fixed sum of 10 s.

Incomes from £125 to 150 pay a fixed sum of £1.

On incomes from £150 to 300 the rate is 6d. on every pound in excess of £100.

On incomes from £300 to 500 the rate is 6d. in the pound without exemption.

On incomes from £500 to 1000 the rate is 6d. in the pound for the first £500 and 7d. in the pound on the surplus.

On incomes from £1000 to 1500 the rate is 7d. in the pound for the first £1000 and 8d. in the pound on the surplus.

On incomes over £1500 the rate is 8d. in the pound.

In the case of incomes from property the rates are as follows:¹¹

Incomes from £100 to £120 pay £1.

Incomes from £120 to £300 pay 1 s. in the pound over £100.

Incomes over £300 pay 1 s. in the pound without exemptions.

In South Australia the income tax was originally introduced in 1884, and is now in force as follows. Incomes from personal exertion pay 4½ d. in the pound up

¹⁰ *Victorian Year Book*, 1905, by E. T. Drake, Government Statistician, pp. 130, 131.

¹¹ Coghlan, *op cit.*, p. 677.

to £800, and 7d. in the pound on the excess. On incomes from property the rates are 9 d. in the pound up to £800, and 13½d. in the pound on the excess. There is an exemption of £150 in all cases as long as the income is below £400. Beyond that point there is no exemption. Furthermore, there is no exemption at all for absentees who are defined as those who have been absent one year.¹²

In Tasmania the arrangement is somewhat different. The ordinary rates are 6d. in the pound on incomes from business, and 1 s. in the pound on incomes from property. There is, however, an exemption of £100, and there are, moreover, various deductions, arranged as follows :

From £100-110 the deduction is £80			
110-120	"	"	70
120-150	"	"	60
150-200	"	"	50
200-250	"	"	40
250-300	"	"	30
300-350	"	"	20
350-400	"	"	10

In 1904 an important change was made, whereby the income tax proper was limited to income from property, and to corporate income, while all unearned incomes were henceforth subjected to the "tax on ability."¹³ This tax on ability, or non-inquisitorial income tax, as it is also called, seeks to ascertain the tax-payer's income by a reference to the rental of the house he occupies. The tax-payer's income is determined according to the following schedule :

When the assessed annual value of the house is under £30 the taxable amount is five times that sum.

When the assessed annual value is from £30 to 40 the taxable amount is six times that sum.

¹² Coghlan, *op. cit.*, p. 678.

¹³ An act to levy a tax upon persons in proportion to their means or ability. 4 Edw. VII, no. 17 (1904).

§ 15. *The United States.*

In the United States the progressive principle has been applied to no less than six classes of imposts, namely, the house tax, the income tax, the business tax, the corporation tax, the inheritance tax and the land tax.

The progressive tax on dwelling houses, which was levied by the Federal government at the end of the eighteenth century, has been described above,¹ and needs no further mention here. The next important illustration of the progressive principle is to be found in the income tax during the Civil War.²

(a) *The Income Tax.*

The income tax, although discussed during the war of 1812, was first introduced into our national financial system during the opening years of the Civil War. The original act of 1861 provided for a proportional tax on the excess on all incomes over \$800. This law, however, for several reasons not necessary to explain here, was never put in force. The first law actually executed, that of July 1, 1862, provided for a general tax on so much of all incomes as exceeded \$600. From \$600 to \$10,000 the rate was three per cent; above that five per cent.³ The minor variations for different sources of income do not interest us in this place. The commissioner of internal revenue, in his first report, advocated a further graduation of the tax, making the full rate begin only with incomes of \$20,000. He proposed a four per cent tax for incomes

¹ Page 29.

² It is to be regretted that the account of the income tax, in Lalor's *Cyclopædia of Political Science*, ii, p. 480, should be so inaccurate.

³ Act of July 1, 1862, §§ 89-93.

from \$5,000-10,000, a five per cent tax from \$10,000-20,000, and a five and a half or six per cent tax above \$20,000.⁴ The plan, although with somewhat different figures, was adopted in the new law of 1864. Incomes were now divided into three classes. On incomes below \$5,000 the rate was five per cent on the excess above \$600; incomes from \$5,000-10,000 paid seven and a half per cent; incomes above \$10,000 paid ten per cent.⁵ The special additional income tax of 1864 was, however, proportional, not progressive.⁶

Secretary Fessenden, in his report for 1864, defended the progressive income tax in the following words: "The adoption of a scale augmenting the rate of taxation upon incomes as they rise in amount, although unequal in one sense, cannot be considered oppressive or unjust, inasmuch as the ability to pay increases in much more than arithmetical proportion as the amount of income exceeds the limit of reasonable necessity."⁷ Congress was evidently of his opinion, for it continued the principle, although in 1865 one of the classes was omitted. By this law all incomes below \$5,000 paid five per cent on the excess over \$600; while all incomes over \$5,000 now paid ten per cent.⁸ After the Civil War was over, and the need of large revenues diminished, the rate of the tax was reduced and made uniform,⁹ and the limit of exemption was gradually increased until the tax itself came to an end in 1872. The interesting history of the tax, as

⁴ *Report of the Commissioner of Internal Revenue for the Year ending June 30, 1863*, p. 11.

⁵ Act of June 30, 1864, §§ 116-123.

⁶ Joint Resolution no. 77, July 4, 1864.

⁷ Report of the Secretary of the Treasury, 1864, p. 15.

⁸ Law of March 3, 1865, Thirty-eighth Congress, Second Session, chap. 78.

⁹ Law of March 2, 1867, Thirty-ninth Congress, Second Session, chap. 169.

well as a comparison with other taxes and a criticism of the results, must be reserved for another place, as the mere fact of graduation was, in itself, not of great importance as compared with some of the other features of the tax.

The principle of progression was also applied to the income taxes of the Confederacy during the Civil War. By the law of April 24th, 1863, all salaries, except those of naval and military officers, were taxed one per cent if not exceeding \$1,500, but two per cent on any excess.¹⁰ All other incomes, from property, labor, etc., were taxed according to a much more severe scale. Incomes below \$500 were exempt; from \$500 to \$1,500 the rate was five per cent; on all incomes over \$1,500 and less than \$3,000, five per cent was levied on the first \$1,500 and ten per cent on the remainder; incomes between \$3,000 and \$5,000 paid ten per cent; incomes between \$5,000 and \$10,000 paid twelve and a half per cent; incomes of \$10,000 and over paid fifteen per cent.¹¹ Special provision was made for joint stock companies and corporations. A general tax of ten per cent was levied on their profits. But when they made a profit of between ten and twenty per cent on their capital stock paid in, they were taxed twelve and a half per cent on the profits; in case the profits exceeded twenty per cent the tax was as high as sixteen and two-thirds per cent. The amendatory act of February 17, 1864, exempted salaries of \$1,000, but made no changes in the rates.

Graduated income taxes have not been confined to the national government. They are also found in the separate commonwealths, especially in the South.

¹⁰ In Matthews, *The Statutes at Large of the Confederate States of America*, p. 120; Statute iii, chap. 38, sec. 7.

¹¹ *Ibid.*, sec. 8, vi. Cf. J. C. Schwab, *The Confederate States of America, 1861-1865*, 1901, p. 300.

In Virginia the income tax has existed since 1843. It was at first a tax on salaries and professional incomes, and a partial tax on funded incomes. It afterwards became a more general income tax. In 1852 the tax was made degressive, but the graduated scale was applied only to personal incomes. On incomes derived from salaries and official fees, the rates were as follows: one-fourth of one per cent when the annual income exceeded \$100, and such excess was not more than \$250; one-half of one per cent when such excess varied from \$250 to \$500; three-fourths of one per cent when such excess varied from \$500 to \$1,000, and one per cent when such excess was more than \$1,000.¹² Professional incomes of physicians, surgeons and dentists were taxed as follows: If the annual income exceeded \$400 and the excess was less than \$600, the tax was one-half of one per cent on such excess in addition to a \$5 license tax; if the excess varied from \$600 to \$1,000 the rate was three-fourths of one per cent; if the excess exceeded \$1,000 the rate was one per cent.¹³ In 1856 the progressive tax on incomes from salaries or fees was doubled; but the progressive rate previously applied to professional incomes was converted into a proportional rate.¹⁴ In 1861 the progressive rate on incomes from salaries or fees was abandoned and the graduated scale was thus dropped from the entire tax.¹⁵

During the Civil War several other Southern states imposed an income tax, two of them with a progressive scale. This was the case in North Carolina, described below, and in Georgia.

The most remarkable example is that of Georgia. The

¹² *Va. Laws of 1852*, chap. 17, sec. 2.

¹³ *Va. Laws of 1852*, chap. 17, sec. 13.

¹⁴ *Va. Laws of 1855-6*, chap. 9, sec. 28.

¹⁵ Cf. in general, D. O. Kinsman, *The Income Tax in the American Commonwealths*, 1903, pp. 40-45.

law of 1863 made the tax proportional to the percentage of profits on the capital invested.¹⁶ If the income was twenty per cent of the capital, the tax was one-half of one per cent. If the income was twenty to thirty per cent of the capital, the tax was one and one-half per cent; and for every increase of ten per cent in the percentage of profits to capital, the rate increased one-half of one per cent *ad infinitum*. The result was that when the profits equalled the capital invested, the rate would be five per cent, and if the profits were ten times the capital, the entire profits would go as taxes. It actually happened that with the depreciation of paper money several people made nominal profits on a small capital at these higher rates, and were thus assessed at practically all of their profits.¹⁷ In 1863 the law was changed, making the tax rate proportional to the amount, instead of to the percentage, of the income. On all incomes over eight per cent of capital the rates were as follows:¹⁸

Income.	Rate (%)	Income.	Rate (%)
\$1,000-10,000.....	5	\$30,000- 50,000.....	15
10,000-15,000.....	7½	50,000- 75,000.....	17½
15,000-20,000.....	10	75,000-100,000.....	20
20,000-30,000.....	12½	Over 100,000.....	25

The income tax law, after minor changes, which, however, did not affect the principle of progression, was repealed at the close of the war in 1866, having led to much trouble and dissatisfaction.

¹⁶ Georgia *Laws of 1863*, Extra Session, title xviii, sec. 156. Kinsman, *op. cit.*, pp. 93-96.

¹⁷ A brewer, for instance, invested \$50 and made \$1500, or 3000% on his investment. He was informed that his tax amounted to \$2225. On remonstrating that this was more than the entire amount of property which he possessed, the tax collector is reported to have said: "Very well, give me all you have and I will take a note for the rest." *Southern Watchman*, June 17, 1863.

¹⁸ Ga., *Laws of 1863-4*; Regular Session, no. 75, sec. 2.

In one of the border states also we find an example of a progressive income tax during the Civil War. In 1863 West Virginia adopted the old law of Virginia, which had, as we know, in the meantime been changed. According to this law a progressive rate was imposed on incomes from any office or employment, except ministers of the gospel, with rates as follows:¹⁹

$\frac{3}{4}$ of 1%	if the income was between \$250 and \$500
1%	" " " " \$500 " \$1,000
1½%	" " " over \$1,000

This attempt, however, to tax incomes was so unsuccessful that it was not repeated.²⁰

We still have several instances of graduated income taxes in the United States. These are found in North Carolina, South Carolina and Oklahoma.

In North Carolina the income tax dates from 1849. It was at first a tax on commercial and precarious incomes, but was gradually changed until it became a tax on incomes from property not already taxed. The tax was ordinarily proportional, with the exception of a few years during the Civil War. Thus, in 1864, the profits made by the exchange, or in the manufacture, of cloth and woollen goods, leather and leather goods, iron and tobacco, and the profits made in the manufacture of salt were taxed five per cent if the profits did not exceed \$10,000. From \$10,000 to \$20,000, however, the rate of the tax was twelve per cent. From \$20,000 to \$30,000 the rate was fifteen per cent.²¹

In 1866, however, all incomes (except those from sal-

¹⁹ W. Va., *Laws of 1862-3*, chap. 64, sec. 8.

²⁰ Kinsman, *op. cit.*, p. 97.

²¹ N. C., *Laws of 1864*, chap. 27.

aries and fees) were taxed according to a progressive scale as follows:²²

From \$500-1000.....	1%
2000-3000.....	2
3000-4000.....	2½
4000-5000.....	3
5000 and over.....	3½

In 1867 the progression was materially reduced, the rates now being one-half of one per cent on incomes between \$500 and \$3,000, and one per cent on incomes over \$3,000.²³ In 1868 the new constitution prohibited the taxation of income derived from property already taxed, and in 1869 the income tax was again made proportional.²⁴

It was not until 1893 that the principle of progression was reintroduced. According to the law of 1893 the rate was five per cent on all profits and incomes derived from property not taxed; incomes from salaries and fees paid one-half of one per cent on the excess over \$1,000; all other incomes paid the following rates:²⁵

Excess over \$1,000 to \$5,000,—	½	of 1	per cent.
" 5,000 to 10,000,—	¼	" 1	"
" 10,000 to 20,000,—	½	" 1	"
" 20,000,		1	"

The arrangement, it will be remembered, is the same as in some of the Swiss cantons, like Basel and Schaffhausen. In 1895 the rates were slightly raised, as follows:²⁶

Incomes in excess of \$1,000 to \$5,000 paid	¼	of 1%
" " " " 5,000 to 10,000	½	" 1%
" " " " 10,000 to 20,000	1%	
" " " " 20,000	2%	

²² N. C., *Laws of 1866*, chap. 21, schedule A., sec. 8.

²³ N. C., *Laws of 1866-7*, chap. 72, schedule A.

²⁴ N. C., *Laws of 1868-9*, chap. 108. Cf. also Kinsman, *op. cit.*, p. 69.

²⁵ *North Carolina Revenue Act*, 1893, schedule A, sec. 5.

²⁶ N. C., *Laws of 1895*, chap. 116, schedule A, sec. 5.

These rates are still in force. The law, however, has been a complete failure, as a revenue measure. During the year ending 1902, the revenue from the income tax was precisely \$18.²⁷

The other existing example of a progressive income tax is in South Carolina. In that state, after the national income tax had been declared unconstitutional, a progressive income tax was introduced in 1897, with the following rates:²⁸

Incomes from \$2,500 to \$5,000 paid	1%
5,000 to 7,500 "	1½%
7,500 to 15,000 "	2%
15,000 and over "	3%

This also has until recently been a complete failure, the revenue in 1902 amounting to only \$414 for the entire state. Beginning in 1905, however, a more energetic attempt has been made to enforce the law, with the result that the revenue has slowly increased. In 1907 it amounted to over \$36,000, which is still a pitiful figure when compared with the yield of the property tax. The progressive income taxes now in force in the United States may thus be said to be in reality only paper taxes. Whether the same will be true of the latest attempt to levy a progressive income tax remains to be seen. This attempt is being made in the new state of Oklahoma.

In May, 1908, a so-called professional income tax was imposed in Oklahoma. The tax is levied on all incomes from salaries, fees, professions, and property upon which a gross receipts or excise tax²⁹ has not been paid, in excess

²⁷ Cf. Seligman, "The Income Tax in the American Colonies and States," *Political Science Quarterly*, x (1895), p. 241.

²⁸ South Carolina, *Laws of 1897*, no. 335.

²⁹ The gross receipt tax referred to means the so-called "gross revenue tax" of 1908, which imposes a tax on the gross receipts of all public service corporations, of all mining corporations and of petroleum and natural gas companies. The rates vary in the case of

of \$3,500. The rates are as follows:

5	mills	($\frac{1}{2}$ of 1%)	on the excess over \$3,500	up to \$5,000		
7½	"	($\frac{3}{4}$ of 1%)	"	"	5,000	10,000
12	"	(1.2%)	"	"	10,000	20,000
15	"	(1.5%)	"	"	20,000	50,000
20	"	(2%)	"	"	50,000	100,000
33½	"	(3½%)	on all amounts over \$100,000.			

Every tax payer is required to sign a certificate of his income. The assessor in the township is to send to the State auditor lists of income recipients who have not filled out the blanks. The auditor then may take such steps as he deems necessary to require any such person to make proper return of his income, and he may also summon witnesses. The result of the Oklahoma experiment will be watched with interest.

Outside of these few cases of a graduated income tax, the only examples of progressive taxation in the American commonwealths were until recently found in connection with the business taxes in the Southern states and with the corporation taxes, to which we shall now turn our attention.

(b) *Business and Corporation Taxes.*

In many of the Southern states and commonwealths the license or business or excise or occupation taxes, as they are variously called, are arranged by classes, each class of tax-payers paying a fixed sum, graduated according to sales or purchases or receipts or capacity or capital stock or number of years in operation or size of town. Examples of these are the Texas occupation tax on mer-
public service corporations from one-quarter of one per cent on the gross receipts of water works companies to three per cent on the gross receipts of express and car companies. In the case of mining companies the tax is two per cent on coal and one-half of one per cent on lead, zinc, jack, gold, silver and copper. The latter rate also applies to asphalt, petroleum, mineral oil and natural gas companies. *Oklahoma Session Laws of 1907-1908*, p. 640.

chants, which varies from \$3 on purchases of less than \$2,000 to \$300 on purchases over \$750,000; the Tennessee tax on cotton seed oil mills, which varies from \$15 to \$350, according as the press uses from 1,000 to 100,000 tons; and the Virginia tax on distillers of liquors, which varies from a rate of \$30 for a daily capacity of 10 bushels of mash to \$500 for a capacity of 300 bushels, with an additional tax of \$200 for every successive 100 bushels. This system is, however, akin to the graduated scales in the French *impôt des patentes* mentioned above⁸⁰ and is of slight importance.

The graduated corporation taxes, however, deserve a somewhat fuller mention. They are found in various states. In Maine the "excise tax" on railroad companies, originally enacted in 1881, varied from one-fourth of one per cent to three and a quarter per cent of the gross earnings, the lowest rate being applied when the earnings did not exceed \$2,250 per mile, and the rate increasing one-fourth of one per cent for every \$750 earnings per mile until the minimum rate was reached.⁸¹ In 1893 the point at which the minimum rate was applied was limited to \$1,500 per mile, and the tax was now made applicable to telegraph and telephone companies.⁸² In 1901 the rates were again altered so as to be one-half of one per cent when gross earnings are under \$1,000; three-fourths of one per cent when gross earnings are between \$1,500 and \$2,000; and one-fourth of one per cent additional for each \$500 of gross receipts, until the rate reaches four per cent. In Maryland, where railroads have been for many years taxed on their gross receipts, the law of 1896 graduated the tax at the rate of eight-tenths of one per cent on the first \$1,000 gross receipts

⁸⁰ P. 89.

⁸¹ Maine, *Revised Statutes*, title 1, sec. 42.

⁸² Maine, *Acts of 1893*, ch. 166.

per mile, one and one-half per cent when the receipts vary from \$1,000 to \$2,000 per mile, and two per cent on all earnings over \$2,000 per mile.⁸³ In Virginia the tax on telephone companies is graduated from 50c to \$1.50 per telephone, according to the number of telephones. In Tennessee the tax on electric light companies is \$20 for a capacity of under 2,500 lights, rising to \$500 for a capacity of over 10,000 lights. These rates apply, however, only in cities from 50,000 to 100,000 population. In the smaller towns the figures vary slightly.

In the case of three commonwealths, the former graduated system of gross earnings taxation applicable to transportation companies has recently been abandoned. Thus, in Wisconsin, the so-called "license fees" on railroads were, under the law of 1889, five dollars per mile on earnings under \$1,500 per mile; the same plus two per cent on the excess over \$1,500, when earnings varied from \$1,500 to \$3,000; and four per cent when earnings exceeded \$3,000 per mile.⁸⁴ In 1897 the rates were somewhat increased, but in 1903 the whole system was abolished. A graduated license fee, however, still exists for telephone companies, and for electric light and power companies. In the latter cases, when the gross receipts are less than \$800,000, the tax is one and one-half per cent on the first \$250,000 and two per cent on the rest; when the gross receipts are over \$800,000 the rates are increased to three and one-half and four per cent respectively. In Michigan the "specific tax" on railroads ranged from two to two and a half, three, three and a half, and four per cent, according as the earnings were less than \$2,000 a mile, \$2,000 to \$4,000, \$4,000 to \$6,000, \$6,000 to \$8,000, or over \$8,000, a mile.⁸⁵ In 1897 the rates were increased

⁸³ Maryland, *Act of March 27, 1896*.

⁸⁴ Wisconsin, *Annotated Statutes*, 1889, § 1213.

⁸⁵ Michigan, *Laws of 1893*, no. 129.

so as to range from two and one-half to five per cent. In 1900, however, the entire system of taxation of gross receipts was abandoned. Finally, in Vermont, according to the law of 1882, the rate of tax on railroad companies was two per cent for the first \$2,000 earnings per mile, three per cent for the first additional \$1,000; four per cent for the next additional \$1,000; five per cent for everything over \$4,000 earnings per mile. In 1890, however, the tax was made proportional.⁸⁶

(c) *Inheritance Taxes.*

The next example of progressive taxation in the United States is to be found in the graduated inheritance taxes. The last few years have seen a decided impetus to the movement in favor of a graduated scale in this class of taxes.

In 1898, during the Spanish War, the Federal government imposed a tax on legacies and distributive shares on personal property over \$10,000. The minimum rates varied from three-fourths of one per cent to five per cent, being graduated according to relationship; but the rates were increased one-half for sums between \$25,000 and \$100,000; doubled for sums between \$100,000 and \$500,000; multiplied by two and one-half for sums between \$500,000 and \$1,000,000; and multiplied by three for sums over \$1,000,000. The maximum rate was thus fifteen per cent on the highest amounts. The Supreme Court of the United States decided, however, that the rates were applicable only to the individual shares received by the legatees and not to the entire amounts left by the testator. This inheritance tax was repealed in 1902, when the need of a war revenue had disappeared.

Progressive inheritance taxes are now, however, found

⁸⁶ Vt., *Laws of 1890*, chap. 3, p. 5.

in several of the separate commonwealths. The movement began in Ohio, where a law was passed in 1894, applying the progressive principle to the tax on direct inheritances over \$20,000. The rates varied from one per cent on inheritances from \$20,000 to \$50,000, up to five per cent on inheritances over \$1,000,000. This tax was, however, declared unconstitutional in 1895, and has since then not been replaced.⁸⁷

Illinois followed in 1895 with a progressive tax in which the graduation applied, however, only to distant relatives or strangers. This tax was upheld as constitutional by the state courts and finally also in 1898 by the Supreme Court of the United States.

From this time on, therefore, the progressive movement spread with increasing celerity. In 1901 the progressive principle was adopted in four states, Nebraska, Colorado, Washington and North Carolina. In the first three states the progressive scale does not apply to direct relatives, and in North Carolina, where it originally applied also to direct relatives, an amendment in 1903 made the graduation applicable only to distant relatives. In 1903 the principle of progression spread to Wisconsin and Oregon, the graduated scale applying in Wisconsin to all relatives, and in Oregon to the more distant ones. In 1905 California, Minnesota and South Dakota accepted the progressive principle, the first two applying the graduated scale to all relatives. In 1907, Idaho, Massachusetts and Texas fell into line and adopted the principle of progression, the first two again applying the graduated scale to all relatives. The special Tax Commission of New York in 1907 recommended its adoption in New York, with rates higher than those that exist anywhere else in important countries, and the new constitution of Oklahoma ex-

⁸⁷ West, *The Inheritance Tax*, 2nd ed., 1908, pp. 135-6.

pressly authorizes progressive inheritance taxes, an authorization which has been utilized in the recent law of 1908.

This law is the most radical yet enacted in any part of the world, and hence deserves a fuller consideration.

The Oklahoma inheritance tax is arranged in five classes, according to the grade of relationship, the first class being that of husband, wife, children or parents. In this class, on the first \$5,000 above an exemption of \$1,000 in the case of a widow, or of \$5,000 in other cases, the rate is one per cent; in classes two and three the first \$2,000 in excess of the exemption of \$500 and \$250, respectively, pay one and one-half and three per cent respectively; in classes four and five, the first \$500 above the exemption of \$150 and \$100 respectively pay four and five per cent respectively. On the excess above these figures in class one the primary rate is to be increased one one-hundred-and-twenty-fifth of one per cent (0.125%) for every \$100 increase; in classes two and three the primary rate is to be increased one-fiftieth of one per cent (0.050%) for every \$100 increase; and in classes four and five the primary rate is to be increased one-tenth of one per cent (0.1%) for every \$100 increase.

If this enactment is to be interpreted according to the letter of the law,⁸⁸ it means that in class five (distant relatives or strangers) the rates would be as follows:

1/10 of 1%	for each	\$100 excess	
1%	"	"	1,000 "
10%	"	"	10,000 "
100%	"	"	100,000 "

In other words, when the excess over the original \$500 reaches \$100,000 the entire excess will be confiscated. On the other hand, if the wording of the act is to be so

⁸⁸ Oklahoma, *Session Laws of 1907-1908*, 1908, pp. 733 *et seq.*

interpreted that the 100 per cent increase means 100 per cent of the primary rate of five per cent, or double that primary rate, then we should reach the rate of

10%	at an excess of \$100,000
15%	" " " " 200,000
20%	" " " " 300,000
	and so on until we reach
100%	at an excess of \$1,400,000

According to the one interpretation we should reach an entire confiscation at the low figure of \$100,000; according to the other interpretation at the somewhat higher figure of \$1,400,000. But in both cases it will be a confiscation of the excess of the whole inheritance above the sums mentioned. In the other classes the points at which complete confiscation is reached are considerably higher.

Of the thirty American states which now tax inheritances, fourteen, as we have seen, apply the progressive principle. In six states, California, Idaho, Massachusetts, Minnesota, Wisconsin and Oklahoma, the progression applies to all classes of heirs and successors. In six states, Colorado, Illinois, Nebraska, North Carolina, Oregon and South Dakota, it applies only to distant relatives and strangers. In two states, Texas and Washington, it applies to all collateral heirs. For direct heirs the rate rises to two per cent in Massachusetts (at \$100,000); to three per cent in California, Idaho and Wisconsin (at \$500,000); to five per cent in Minnesota (at \$100,000), and to an indefinite rate in Oklahoma. For collateral heirs the rates rise to nine per cent in Massachusetts and Minnesota (at \$100,000); to six per cent in Colorado, Illinois, Nebraska and Oregon (at \$50,000); to ten per cent in South Dakota (at \$50,000); to twelve per cent in Texas (at \$500,000), and Washington (at \$100,000); to fifteen per cent in California, Idaho and Wisconsin (at \$500,000).

000) and in North Carolina (at \$50,000); and to one hundred per cent in Oklahoma.

The exemptions range from \$2,000 in Wisconsin to \$20,000 in Illinois, and the maximum rates are, as indicated above, applicable to sums over \$50,000 in Colorado, Illinois, Nebraska, Oregon, North Carolina and South Dakota; to sums over \$100,000 in Massachusetts, Minnesota and Washington, and to sums over \$500,000 in California, Idaho, Texas and Wisconsin. During the year that the Federal inheritance tax was in force the combined inheritance tax in North Carolina, for instance, reached the enormous sum of thirty per cent on the maximum amounts of personal property.

The striking point about the progressive inheritance tax in the United States is that the constitutionality of the progressive principle has now been definitively confirmed by the Supreme Court. In the Illinois cases it was claimed that progressive taxation was in violation of the rule of equality required by the Fourteenth Amendment. The Court, however, denied this, stating that the rule does not require exact equality of taxation. It only requires that the law imposing the tax shall operate on all alike under the same circumstances. The tax is not on money, but on the right to inherit, and hence a condition of inheritance; and it may be graded according to the value of that inheritance. The condition is not arbitrary, because the amount of the tax is determined by that value; the tax is not unequal in operation because it does not levy the same percentage on every dollar; it does not fail to treat all alike under like circumstances and conditions both in the privilege conferred and in the liabilities imposed.³⁹ What distinction, if any, will be drawn in the case of the confiscatory Oklahoma tax, remains to be seen.

³⁹ *Magoun vs. Illinois Trust and Savings Bank*, 170 U. S., 283.

The progressive principle was also upheld in the Federal inheritance tax. It was claimed that progressive taxation was repugnant to that clause in the Constitution which declares that all indirect taxes should be levied uniformly throughout the United States. The Supreme Court held that the inheritance tax was an indirect tax, in the sense of the Constitution, and that the uniformity required by the Constitution really meant only geographical uniformity.⁴⁰ Thus the progressive principle has been definitely established in the United States.

(d) *Land Taxes.*

Finally, it is worthy of especial note that a novel application of the progressive principle is to be found in the recent legislation of Oklahoma. In this state a unique attempt is being made to restrict large estates in land by the imposition of a progressive land tax. The official title of the tax, which was enacted in May, 1908, is, "The graduated tax on land holdings in excess of 640 acres of average taxable lands and on incomes, rents and profits of lands held by lease or rental contract in excess of 640 acres."⁴¹ The tax is supplementary to the ordinary real estate tax, but is levied only on land exclusive of improvements thereon. The rates, in addition to the ordinary real estate tax, are as follows:

In the case of—

\$640—1,280	average taxable value,	$\frac{1}{4}$ of 1%	on such excess.
1,280—3,000	" " "	1%	on such excess.
3,000—5,000	" " "	2%	" "
5,000—10,000	" " "	5%	" "
10,000—25,000	" " "	10%	" "

The "average taxable value" is declared to be \$20 per acre. Three hundred and twenty acres of land, how-

⁴⁰ *Knowlton vs. Moore*, 178 U. S., 41.

⁴¹ *Oklahoma, Session Laws of 1907-1908*, 1908, p. 725.

ever, are in all cases exempt from this tax. The tax, hence, does not apply to urban property.

Similar rates, levied on the lease holder, are imposed in the case of incomes, rents and profits from land. In such cases, however, the tax is assessed according to acreage, irrespective of value. The law is to go into effect in July, 1909, and its operation will be awaited with the greatest interest. It is the first attempt to apply in the United States a system somewhat similar to that found in New Zealand.

§ 16. *Canada and other British Colonies.*

In Canada progressive taxation has been applied primarily to the inheritance taxes. The progressive scale was first introduced in two provinces in 1892. In Ontario the rates for certain direct relatives were two and one-half per cent, when the estate was between \$100,000 and \$200,000, and five per cent when it exceeded \$200,000. In Nova Scotia the two and one-half per cent rate applied only to the excess above \$25,000 and the five per cent rate to the excess above \$100,000. For other relatives and strangers the tax in both provinces was proportional, or rather it was graduated according to relationship, not according to the amount of the estate, being five per cent for certain relatives and ten per cent for distant relatives and strangers.

Prince Edward's Island followed in 1894 with rates on near relatives of one and one-half per cent on estates below \$50,000, and of two and one-half per cent on sums above that amount. British Columbia in the same year adopted a succession duty with rates varying from one to five per cent according to the amount, but with half rates for direct heirs.

More recently the rates have been increased, except in Prince Edward's Island and Nova Scotia, and have spread to other provinces. In New Brunswick the rates on direct relatives now vary from one and one-quarter to five per cent, according to the amount, while distant relatives pay ten per cent, and in cases where the property goes to any person outside of the province, the rates are doubled. In Manitoba the rates for all classes of heirs vary from one per cent to ten per cent on estates over \$500,000. In Ontario, since 1907, the rates for near relatives vary

from one to five per cent on estates over \$200,000; but additional rates are levied on estates over \$100,000, the rates varying from one per cent up to three per cent on sums over \$800,000. Thus the maximum rate for direct heirs is eight per cent. In the case of more distant relatives the rate varies from five to ten per cent on sums over \$450,000.

In Quebec there is now also an inheritance tax with the highest rates now in force in Canada. In the case of direct heirs, the rates are the same as those in Ontario, but in the case of collateral heirs the rates rise to fifteen per cent on the largest amounts. The following table will show the character of the rates:¹

	Collateral Heirs.			Direct Heirs.	
	Rate %	Exemption.		Rate %	Exemption.
British Columbia	5	-10	\$5,000	1½- 5	\$25,000
Manitoba	1	-10	4,000	2 -10	25,000
New Brunswick	5	-10	5,000	1½- 5	50,000
Nova Scotia	5	-10	5,000	2½- 5	25,000
Ontario	5	-10	10,000	1 - 8	50,000
Prince Edward Island..	2½- 7½	23,000		1½- 2½	10,000
Quebec	5	-15	.....	1 - 8	5,000

We also find a few examples of the progressive scale in some of the other English colonies. Thus, in the Cape of Good Hope, a progressive income tax was imposed by the act of 1904. All incomes over £1,000 pay 6d. in the pound on so much of the income as is between £1,000 and £2,000; 9d. in the pound on so much as is between £2,000 and £5,000; and in addition, 1 s. in the pound on so much of the income as exceeds £5,000.²

In the Leeward Islands, incomes from £50 to £100 are taxed two and one-half per cent, and incomes over £100

¹ *Report of the Special Tax Commission of the State of New York* (1907), p. 131. Cf. also in general West, *The Inheritance Tax*, 2nd ed., 1908, pp. 76-85.

² Cf. *Return on Graduated Income Taxes in the Colonies*. Colonial Office, 1905, no. 196, pp. 21-22.

pay three and one-half per cent ; £50 being exempt in each case.

In St. Vincent the income tax law in 1904 imposed the following rates :

Incomes of £50.....	exempt
From £50 to 100.....	20 s. per £100
100 to 200.....	30 s. " 100
200 to 300.....	40 s. " 100
Over 300.....	60 s. " 100

§ 17. *Other Countries.*

In addition to the countries discussed above, we find the application of the progressive rate also in Spain, in Mexico and in Japan.

In Spain, the progression is applied to only a very small extent. The law of 1900 introduced a slight graduation in that part of the tax on personal incomes which is imposed on the salaries of state officials. The rate varies from fifteen to twenty per cent, according to the amount of the salaries of active government officials, with somewhat different rates for other classes of salaries.¹

In Mexico there is a very slightly progressive inheritance tax since 1901. The rates of the Federal inheritance tax are arranged in two classes, with the dividing line at 10,000 pesos. The rates for descendants, husband and wife vary from one-half of one per cent to one per cent; for ascendants, from one to two per cent; and for relatives from the second to the fourth degree, from three to four per cent. In the case of more distant relatives, the tax remains proportional.²

In Japan the progressive principle has recently been applied to both the income tax and the inheritance tax. The income tax was created in 1887, but the progressive rates were introduced somewhat later. In 1908 the normal rates were as follows: on corporations, two and one-half per cent; on interest from bonds, public and private, two per cent; on all other incomes, arranged according to the following twelve classes:

¹ Cf. *Reports from His Majesty's Representatives Abroad respecting Graduated Income Taxes in Foreign States*, 1905, pp. 132-133.

² For details, see West, *op. cit.*, p. 58.

Incomes.	Rate
100 to 300 yen	1%
500 "	1.2
1,000 "	1.5
2,000 "	1.7
3,000 "	2.
5,000 "	2.5
10,000 "	3.
15,000 "	3.5
20,000 "	4.
30,000 "	4.5
50,000 "	5.
100,000 "	5.5

During the war and since that time the rates have been increased so that the addition amounts to from ten per cent to twenty-seven per cent, of the normal rate in the various classes.³

The Japanese inheritance tax, which was introduced in 1905, also has progressive rates that have been arranged in such wise that the rate begins at one and two-tenths per cent and increases gradually until for inheritances between 70,000 and 100,000 yen the rates vary from four to six and one-half per cent. Beyond that point the rate increases one-half of one per cent for each additional 50,000 yen, up to 1,000,000 yen, when the progression ceases.⁴

³ Cf. the *Eighth Financial and Economic Annual of Japan*, Tokyo, 1908, p. 21.

⁴ Cf. the *Seventh Financial and Economic Annual of Japan*, Tokyo, 1907, pp. 19, 21 and 26. The *Eighth Annual* does not contain the details.

§ 18. *Conclusion.*

From the above review it is evident that the tendency toward progressive taxation is almost everywhere on the increase. Whether we deplore it or not, democracy is asserting itself more vigorously and it is precisely in the most democratic countries like Australia and Switzerland that the movement in favor of progressive taxation is the strongest. The results thus far, as we have seen, have not been of a character to justify the fears of the alarmists. In Switzerland the national prosperity is on the increase, capital is growing and the principle of graduated taxation is no longer deemed debatable. Its enforcement has given general satisfaction. It must be remembered, however, that the chief application of the progressive principle is found in the inheritance taxes, which are levied only once, and that in the case of the annually recurring property and income taxes the graduation has assumed the form of degression rather than progression. Under such conditions the edge is taken off the ordinary objections to the system of graduation. In Australia, Sir Charles Dilke tells us,¹ the institution of private property has not been weakened, nor has capital been driven away. The people are satisfied with the progressive principle and are extending its operation year by year. In Germany and Austria, progression, as a principle, is no longer seriously combated. Even in England a graduated income tax has become one of the planks of the radical platform, and a government

¹ *Problems of Greater Britain*, part vi, chap. 1. This is confirmed in the recent testimony of Mr. Coghlan before the Select Committee mentioned in the next note.

commission has reported in its favor.² As the Hon. James Bryce writes in a recent letter: "Progressive inheritance and income taxes are likely to figure largely in time to come in European politics." The same statement may be hazarded of American politics as well. The facts, therefore, seem to be in the direction of progressive taxation. Let us endeavor to ascertain what the verdict of theory is.

²*Report from the Select Committee on the Income Tax.* 1906. no. 365.

PART II
THE THEORY OF PROGRESSIVE
TAXATION

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CHAPTER I.

THE SOCIALISTIC AND COMPENSATORY THEORIES.

There is scarcely any topic of economic inquiry which has aroused the interest of scientists and would-be reformers to a greater degree than the theory of progressive taxation. Yet, with but few exceptions, almost every writer has simply advanced his own views on this topic, without reference to the work of his predecessors or without an adequate discussion of the arguments of his opponents. It will be our purpose in what follows to collect every argument of consequence that may have been advanced on any side of the controversy in order that we may attain a firm basis for our own conclusions. With a view of avoiding undue digressions, the detailed history of each important theory is relegated to the historical appendices.

The arguments that have been urged in favor of progressive taxation may be grouped in three classes which must be carefully distinguished. These may be called respectively the socialistic, the compensatory and the economic theories.

The foremost scientific advocate of what is here termed the socialistic theory of progression is the German economist, Adolf Wagner. Prof. Wagner distinguishes between the purely fiscal period in the history of public finance and the "socio-political" period. The essence of the first period consists in the simple endeavor on the part of the government to raise a revenue adequate to its needs. The essence of the second period consists in the predominance of social reasons over purely fiscal reasons. The state is no longer satisfied merely with raising an adequate rev-

enue, but now considers it a duty to interfere with the rights of private property in order to bring about a more equitable distribution of wealth. The fiscal policy looks merely to the needs of the administration; the "socio-political" policy looks at the relations of social classes to each other, and the best methods of satisfactorily adjusting these relations. The fiscal policy necessarily results in proportional taxation; the "socio-political" policy results in progressive taxation. The ethical demands of modern civilization are everywhere preparing the way for a transition from the old fiscal period to the incipient socio-political period. It is these ethical or social reasons alone which can logically serve as a basis for progressive taxation.

This distinction of Wagner is, however, open to serious criticism. It is not true historically that the tax policy of various nations has been adjusted solely with reference to purely fiscal reasons. All governments have allowed social considerations in the wider sense to influence their revenue policy. The whole system of protective duties has been framed not merely with regard to revenue considerations, but also with the aim of producing results which should directly affect social and national prosperity. Taxes on luxuries have often been mere sumptuary laws designed as much to check consumption as to yield revenue. Excise taxes have frequently been levied from a wide social, as well as from a narrow fiscal, standpoint. From the very beginning of all tax systems these social reasons have often been present. The attempt sharply to distinguish such periods historically, therefore, can scarcely be termed successful.

But, on the other hand, it is not allowable to confound this undoubtedly social element in all fiscal policy with what Wagner calls the socio-political, or what might be

termed not incorrectly the socialistic element. From the principle that the state may modify its strict fiscal policy by considerations of general social utility to the principle that it is the duty of the state to redress inequalities of fortune by taxation, is a long and dangerous step. It would land us not only in socialism, but practically in communism. If this were one of the acknowledged functions of government, it would be useless to construct any science of finance. There would be only one simple principle: confiscate the property of the rich and give it to the poor.

The difference between the social element and Wagner's "socio-political" idea is virtually the difference between social reform and socialism. We may indeed deprecate the existing conditions which affect the distribution of wealth. Where so much is spoken, however, of unjust arrangements, it is desirable to come to an understanding as to what is really meant by the term justice. To give an adequate discussion of this fundamental problem would indeed require a whole volume. It may, however, be permissible to put the conclusions tentatively and aphoristically as follows: Justice, so far as the action of the state is concerned, consists in holding the balance equal; in giving none an undue advantage; in affording each individual equal rights before the law and equal opportunities to develop his own talents and his own resources. Justice indeed demands that the state should do nothing consciously and purposely to increase inequality of wealth; but we clearly transcend the claims of justice when we demand that the state should do away with all inequalities of wealth. Justice, in the sense of equality, may indeed demand changes in the existing forms of taxation. This involves the problem of the equal treatment of all, as against historic inequality and

its survivals in the tax systems of the world at present. In this sense, indeed, there is room and need for social reform; but it is a reform which consists in checking the continuance of old unequal laws, not in fostering the growth of new unequal laws. Legal justice means legal equality; but a legal equality which would attempt to force an inequality of fortune in the face of natural inequalities of ability would be a travesty of justice.

We may indeed grant the crying need for social reform. In so far, however, as the government is concerned, the possibility of reform lies rather in the general attitude of the legislator toward social and industrial matters. Especially in the field of finance, the chief social reforms are to be found in the domain of outlay and expenditure rather than in that of revenue. They consist primarily in extending the benefits of governmental activity to the poor and needy, and in enabling even the lowest classes to participate, as far as possible, in the advantages of a progressive civilization. Even here it is a question how far it is wise to go; and the answer depends not alone on fiscal reasons, but also on broader considerations of general governmental policy. In the field of public revenue, however, we do not deny for a moment that social considerations should play a role. But, as has been pointed out above, this has always been the case, and will always be so. Nor can we overlook the growing realization by the community of the social characteristics of wealth, and of the increasing importance attached to the social origins and the social content of private property.¹ But from this it is a far cry to Professor Wagner's "socio-political" demand that the state introduce progressive taxation in

¹ See e. g. Seligman, *Principles of Economics*, ch. ix, and in its application to taxation, especially the Report of the New York Tax Commission mentioned at almost the close of this monograph.

order to equalize social conditions. Progressive taxation may indeed incidentally accomplish this result, but if it cannot be defended on distinct and independent grounds, its advocates can with difficulty repel the charge that it is virtually a socialistic doctrine. To erect the "socio-political" demand into a separate and fundamental basis of taxation is a proceeding fraught with perilous possibilities.

It may indeed be conceded that in the face of so cardinal a point as the control of the land, it is perhaps competent for the government to take steps to prevent by fiscal methods a condition of land-holding which may come to be a menace to political tranquility and democratic progress. The attempt of a democracy to levy progressively higher taxes on very large estates is thus not so subject to criticism, even though it is a matter of serious doubt whether the desired end could not be better attained in some other way.² But this is largely because of the fact that while progressive taxation may prevent the aggregation of large plots in a few hands, it cannot lessen the amount of land itself; whereas a similar attempt to apply the principle to property in general, might tend to a weakening of the motive to the accumulation of property. Thus Thomas Paine, who was very far from being a socialist, advocated progressive taxation as a defense against primogeniture.³ In the same way the land tax legislation

² This is the opinion of the man best qualified to judge as to the results of the New Zealand legislation. See the reasoning of T. A. Coghlan in *Minutes of Evidence, British Report of Select Committee on the Income Tax*, 1906, qu. 1328.

³ "Admitting that any annual sum, say for instance, one thousand pounds, is necessary or sufficient for the support of a family, consequently the second thousand is of the nature of a luxury, the third still more so, and by proceeding on we shall at last arrive at a sum that may not improperly be called a prohibitive luxury. It would not be impolitic to set bounds to property acquired by industry, and

of New Zealand and of Oklahoma, which has been described above, ought not properly to be called socialistic. So far, however, as the general "socio-political" theory is concerned we must conclude that the position is untenable to the extent that it implies a conscious effort on the part of the government to levy higher taxes on the rich in order to reduce them to the level of the poor.

This theory, moreover, is not new with Wagner. As far back as the end of the fifteenth century, when the whole Florentine republic was convulsed with the conflict over the progressive tax—*la decima scalata*⁴—the distinguished historian and publicist, Guicciardini, wrote two remarkable treatises in which he discussed the arguments for and against progression. In the first essay he really foreshadows many of the most important of the recent theories on the subject, including what are termed in this work the economic theories; but he nevertheless lays the

therefore it is right to place the prohibition beyond the probable acquisition to which industry can extend; but there ought to be a limit to property or the accumulation of it, by bequest."

"The following table of progressive taxation is constructed on the above principles, and as a substitute for the commutation-tax. It will reach the point of prohibition by a regular operation, and thereby supercede the Aristocratical law of primogeniture."

"The object is not so much the produce of the tax, as the justice of the measure." "But the chief object of this progressive tax (besides the justice of rendering taxes more equal than they are,) is, as already stated, to extirpate the overgrown influence arising from the unnatural law of primogeniture, and which is one of the principal sources of corruption at elections."

"It would be attended with no good consequences to enquire how such vast estates as thirty, forty, or fifty thousand a year could commence, and that at a time when commerce and manufactures were not in a state to admit of such acquisitions. Let it be sufficient to remedy the evil by putting them in a condition of descending again to the community, by the quiet means of apportioning them among all the heirs and heiresses of these families." Thomas Paine, *Rights of Man*, 1791. Cf. London ed. of 1817, part 2, pp. 99-101.

⁴ See above p. 22.

chief stress on the argument that progressive taxation will lessen the disparity of fortunes and prevent the excessive accumulation of wealth. Progressive taxation, in short, must be defended on general considerations of social policy. Guicciardini himself, it is true, sides with the opponents of progression, whose arguments he develops in the second essay; but his first essay remains of great importance to-day as reflecting the arguments of the earliest literary advocates of the principle of progression. It is remarkable that it should have received so little attention outside of Italy.⁵

Even a moderately progressive tax, says he, will not suffice to bring about justice and equality, because it would not restrict the rich man in the same degree as the poor man in the satisfaction of his necessities. For since we are all citizens of the same state and each the equal of the other, there can be no true equality or justice in taxation unless the taxes reduce us all to the same economic level.⁶ For to have too much wealth does not do any one any good, but on the contrary is a dangerous thing not only

⁵As Guicciardini died in 1540 the essays were probably written at the beginning of the sixteenth century. The two essays were first published separately under the title, "La decima scalata in Firenze," 1849, but were afterwards included in Guicciardini's *Opere Inedite*, vol. x, 1867, p. 353 *et seq.* The first one to call attention to these arguments was Canestrini, *La Scienza e l'Arte di Stato desunta dagli Atti ufficiali della Repubblica Fiorentina.. Parte I.. L'Imposta sulla Ricchezza mobile e immobile*, 1862, 219 *et seq.* Ricca-Salerno, *Storia delle Dottrine Finanziarie in Italia*, 1881, 36 *et seq.*, 2 ed. 1896, 73 *et seq.*, also refers to them. Since the first edition of the present work appeared, Dr. Grabein has quoted liberally from Guicciardini in an article in Schanz, *Finanz Archiv*, xii (1895), p. 11-24.

⁶"Anzi il povere può dolersi e chiamare questa gravezza ingiusta e ineguale, perchè la non sconda nelle cose necessarie i ricchi parimenti come lui . . . Questa sarebbe la giustizia e la egualità delle gravezze, se le fossero di sorte, che così come noi siamo cittadini di una medesima città, tutti oggi di pare l'uno all'altro, le ci riducessino anche tutti in uno medesimo modi vivere."

for the body politic, but for the citizens at large, and even for the owners themselves.⁷ If, then, we introduce the progressive principle we shall become truly equal as we reasonably ought to be.⁸

Later on, not to speak of the mediaeval socialists, we find the same theory during the French Revolution. The Jacobins especially were ardent upholders of the principle. Thus, in 1793, in adopting the theory of progression, they declared that they desired to employ a progressive tax in order to reduce all fortunes to a level of 4,500 livres' income.⁹ Robespierre thought that even this allowance was too liberal, and desired to make 3,000 livres the maximum. A little later, however, as will be shown below, he qualified his conclusions. Furthermore, Ramel, in presenting the scheme of progressive taxation to the Convention, which, it will be remembered, soon adopted the project,¹¹ made a distinction between a forced loan, levied only once, and a regular system of progressive taxes. "Even in the latter case," said he, "while the rate ought never regularly to reach 100 per cent, the object must be to lead gently to an equality of wealth."¹²

⁷ "L'avere troppe possessioni non fa bene alcuno, ma infiniti danni alla città, e ai cittadini e a quelli medisimi che l'hanno."

⁸ "Cosi diventaremo tutti veramente pari, come ragionevolmente dobbiamo essere."

⁹ "Impossible de mieux déraciner les fortunes: quant à celles que nous ne renversons pas d'un seul coup, nous les abattons par morceaux, et contre elles nous avons deux hâches. D'un côté nous crétons l'impôt progressif, et sur cette base nous établissons l'emprunt forcé; nous séparons dans le revenu le nécessaire de l'excédant; selon que l'excédant est plus ou moins grand, nous en prenons le quart, le tiers, la moitié et passé 9000 livres, le tout; au delà de sa mince réserve alimentaire la plus opulente famille ne gardera que 4500 livres de rente. Quoted in De Retz de Serviez, *De l'impôt Progressif*, 1904, pp. 31-32.

¹¹ See above, p. 33.

¹² "Quelque système de contribution progressive que vous adoptiez, il n'entrera jamais dans vos vues de l'établir tel qu'à une somme

Shortly afterwards Babeuf declared that progressive taxation, while it could not go to the root of the social evils, was a useful tool to split up property, to prevent large fortunes and to remove luxury. "L'impôt progressif," if it could be successfully assessed, "serait un moyen efficace de morceler les terres, d'empêcher la cumulation des richesses, et de bannir l'oisiveté et le luxe." But "cette manière d'asseoir l'impôt serait, tout au plus, un acheminement au bien; elle pallierait le mal, mais elle n'en couperait la racine."¹³ The three methods of attaining equality were in his opinion the partition of land, sumptuary laws and progressive taxation.¹⁴

Since the French Revolution the same idea has almost uniformly been a part of the socialistic creed, whether among the communists, the early sentimental socialists or the American populists. In France, for instance, we find it developed by Decourdemanche, one of the disciples of St. Simon,¹⁵ as well as by a number of writers in the

quelconque il pose un terme à la fortune des citoyens. Vous ne mettez point des bornes ni à l'émulation ni à l'industrie des citoyens; mais vous ferez des lois sages, qui, après avoir laissé aux hommes la jouissance du fruit de leurs travaux, ramèneront par des voies douces, au niveau de l'égalité les fortunes qui en sont sorties." Cf. Gomel, *Histoire Financière de la Législative et de la Convention*, ii, (1905), p. 115.

¹³ P. Buonarroti, *Conspiration pour l'Égalité dite de Babeuf*, 1828, i, p. 86.

¹⁴ *Ibid.*, i, p. 85. Babeuf's early ideas were in favor of proportional taxation. He so interpreted the term faculty as used in the decrees of the National Assembly, in a pamphlet entitled: *Reclamation de la Ville de Roye, relative au Remplacement de l'Impôt des Aides, et à l'exécution des Décrets de l'Assemblée Nationale qui prononcent que tous les Impôts doivent être repartis sur chaque Citoyen en proportion de ses Facultés*, etc. 1790. See Victor Advielle, *Histoire de Gracchus Babeuf et du Babouvisme d'après de nombreux Documents inédits*. 1884, i, p. 491-492.

¹⁵ Decourdemanche, *Lettres sur la Législation dans ses Rapports avec l'Industrie et la Propriété*. 12e Lettre. *Considérations gén-*

Revolution of 1848.¹⁶ In Switzerland the socialist theory is found in its naive form in Obermüller, who advocates a rate rising to fifty per cent.¹⁷

In the United States the same doctrine has been advocated on analogous grounds, especially by the Populists. For over a decade, from 1888 on, the scheme was developed in numerous publications by W. W. Marshall, under the name of "cumulative taxation." During several years, beginning in 1895, he even edited a special periodical on this subject, *The Graduated Taxpayer*, devoted, according to the prospectus, "to a system of taxation calculated to limit the growth of abnormal private fortunes, prohibit excessive combinations, trusts and monopolies, and lighten the tax burdens of the less wealthy who are now required to pay a share disproportionately large." Among his collaborators was Percy Daniels, Lieutenant-Governor of Kansas, and author of a graduated tax bill introduced into Congress about this time.¹⁸ With the disappear-

érales sur les Finances. Extraite du Globe du 1 es Août, 1831. Ibid., 14e Lettre, 6 Sept., 1831.

¹⁶ Such as Danré, *Question de la juste Répartition de l'Impôt résolu arithmétiquement et Défense de l'Impôt Progressif*. 1845.

¹⁷ W. Obermüller, *Das Gütergleichgewicht. Eine Lösung der Frage: Wie ist dem Elende der arbeitenden Volksklassen abzuhelfen?* Konstanz, 1840, p. 20.

¹⁸ The chief writings of Marshall are as follows: *The Industrial Hand Book*, Garden City, 1888; *Cumulative Taxation*, Winfield, Kan., 1890; *The Tax Solution*, Berlin, Pa., 1893; *The Graduated Tax Payer*, vol. I, no. 1, to vol. III, no. 2, Berlin, Pa., 1895-1897; *Industrial Charts Showing at a Single Glance the Bad Effects of Monopolistic Over-Profitting, the Prevention of the Same, and the Good Results to Follow*, Berlin, Pa., 1895; *Deprofitization*, Chicago, 1899.

The chief writings of Percy Daniels are: *The Sunflower Tangle over Problems of Taxation*, Girard, Kan., 1894; *A Crisis for the Husbandman with Supplement containing Graduated Tax Bill*, Girard, Kan., 1889; *A Lesson of To-day and a Question of To-morrow*, Girard, Kans., 1892.

ance of the Populist movement, however, the agitation for a graduated income tax to cut down the earnings of the large industrialist to the level of the small entrepreneur subsided.

Finally, even in the case of the economists we find the principle already expressed in the third quarter of the eighteenth century by von der Lith.¹⁹ Since then it has been occasionally urged, as of late by the German economist, von Scheel.²⁰ The great mass, however, even of the German economists, including most of Wagner's own pupils, repudiated the principle.²¹

The most recent development of the doctrine, however, is to be found in France, where M. Dufay has become its prominent apostle.²² M. Dufay contends that taxation has not only an economic or fiscal role to play,

Other publications of sympathizers with this movement during the same period were: Chas. M. Howell, *Practical Methods of Equalizing Taxation and Limiting the Growth of Abnormal Private Fortunes*. Berlin, Pa., 1895; M. Jacobson, *An Ounce of Prevention to save America from having a Government of the Few*, Berlin, Pa., 1895.

¹⁹ "Ein weiser Regent wird mithin die Steuern dazu anwenden, um die gemeldete Ungleichheit des Vermögens seiner Unterthanen zu vermindern. Wenigstens wird er dieselbe nicht durch die ungleichen Anlagen vermehren." J. W. von der Lith, *Neue vollständig erwiesene Abhandlung von den Steuern*, 1766, sec. 36. Von der Lith, however, desires to apply this idea primarily to an excise on luxuries. It is only in time of great need that he would apply it also to the direct property tax.

²⁰ v. Scheel, "Die progressive Besteuerung." In *Tübinger Zeitschrift für die gesammte Staatswissenschaft*, vol. 31 (1875), p. 273. He bases his demand on what he calls the socio-political reasons, thus using the same term which Wagner later adopted.

²¹ The most recent is M. von Heckel, *Lehrbuch der Finanzwissenschaft*, 1907. See vol. i, pp. 126 et seq.

²² In a book entitled *L'Impôt Progressif en France*, 1904. The second edition, much enlarged, appeared in 1905. In 1906 he published a smaller work entitled *L'Impôt Progressif sur le Capital et le Revenu*.

but what he calls a moralizing role. Taxation, he tells us, must "maintain within a just limit the particular appropriation of wealth produced at least indirectly by the labor of all; it must maintain among men a certain real equality, correcting and attenuating the effects of individual egoism and of extreme natural equality."²³ In other words, the role of taxation is "to free labor, instead of compressing or restraining it, as at present." Hence taxation must "abstract from capital its excessive power and give to labor a social and economic power which it still has to an inadequate degree."²⁴

If, therefore, the "socio-political" argument were the only defense of progressive taxation, it is plain that it could not be successfully upheld. While Professor Wagner would undoubtedly warmly resent the imputation of socialism, there is in the fiscal domain, at least, a scarcely discernible line of separation between socialism and the socio-political theory.²⁵ The "socio-political" argument, which undoubtedly lies at the basis of many of the demands for progressive taxation, must, therefore, be rejected by those who are not prepared logically to enroll

²³ "L'impôt doit avoir pour objet de maintenir dans une just limite l'appropriation particulière de la richesse produite au moins indirectement par le travail de tous; it peut et doit maintenir entre les hommes une certain égalité réelle, corrigeant ou atténuant les effets de l'égoïsme individuelle et de l'extrême inégalité naturelle." *L'impôt Progressif en France*. 2nd ed., 1905, p. vi.

²⁴ "C'est non seulement un rôle économique, mais un rôle moralisateur qu'il doit jouer, un rôle d'affranchissement du travail au lieu du rôle de compression qu'il joue actuellement. Il doit contribuer à enlever au capital ce qu'il a d'excessif dans sa puissance et rendre au travail une puissance sociale et économique qu'il n' a plus aujourd'hui à un degré suffisant." *Ibid*.

²⁵ Professor Wagner's views, which, as stated in the text, have found scarcely any acceptance in his own country, seem to be shared in part, at least, by Professor H. C. Adams, who somewhat objects to what he terms the vigor of the above attack. See his *Science of Finance*, 1898, p. 342.

themselves among the socialists. Unfortunately, however, most of the middle classes, as well as many professed economists, have confounded the economic theory of progressive taxation with the socialistic theory, and have assumed that progressive taxation necessarily implies socialism and confiscation.²⁶

This is, perhaps, the reason of the fierce denunciation with which the project of progressive taxation has often been met. Thus, at the time of the discussion of the first income tax in the English parliament, in 1799, Lord Auckland said that graduated taxation was outright revolutionary.²⁷ The German statesman, Gentz, said at about the same period that progressive taxation was not much better than common thievery.²⁸ Some time previously, when Turgot, the celebrated French statesman, was presented with a project of progressive taxation, he wrote on the margin: "We must execute the author, not the project."²⁹ John Stuart Mill calls it "graduated robbery"; Dupont maintains that progressive taxation is socialistic and revolutionary;³⁰ Leroy-Beaulieu claims that

* This is true of a whole host of writers in every language. The ablest American exponent of this view is Mr. David A. Wells. Cf. his "The Communism of a Discriminating Income Tax," (by which he really means "The Socialism of a Progressive Income Tax"), *North American Review*, March, 1880. Cf. for Italy, Garofalo, *La Superstizione Socialista*, 1895.

"Progressive taxation "would be contrary to all the safety and rights of property"; it would "be worthy only of the French Council of Five Hundred"; and it "would amount to neither more nor less than the introduction of a plan for equalizing fortunes," etc. Cf. *The Substance of a Speech made by Lord Auckland in the House of Peers upon the Bill for granting certain Duties upon Income*, 1799, p. 25.

²⁸ Gentz, in *Historische Journal*, 1709, p. 3. Quoted in Murhard, *Theorie und Politik der Besteuerung*, 1834, p. 544.

²⁹ "Il faut exécuter l'auteur, et non le projet."

³⁰ "L'impôt progressif c'est véritablement le socialisme dans l'impôt

"its mother is envy and its daughter oppression";⁸¹ Es-sarts characterizes it as the result of the envy of the "have-nots" which they subsequently seek to defend by sophistical arguments;⁸² Stourm thinks that it is an instrument of general spoliation and confiscation;⁸³ and Umpfenbach describes it as the realization of communism and an extreme absurdity, fit only for a community permeated by murderous tendencies.⁸⁴

Notwithstanding these extreme statements, however, it is erroneous to assume that progressive taxation necessarily implies socialism and confiscation. It is possible to repudiate the socialistic theory of taxation, and yet at the same time to advocate progressive taxation on purely economic grounds. One may in fact be an arch individualist, and nevertheless believe in progressive taxation. We shall see the truth of this when we take up the arguments of the individualistic school of progressive taxation.

. . . c'est évidemment l'impôt révolutionnaire." Etienne Dupont, *De l'Impôt*, 1852, p. 23.

⁸¹ "L'impôt progressif a pour mère l'envie et pour fille l'oppression." Paul Leroy-Beaulieu, *Traité d'Economie Politique*, 2nd ed., 1896, iv, p. 764.

⁸² It is "la traduction du sentiment de l'envie du non-possédant contre le possédant, qu'on essaye après coup de justifier par des raisonnements plus ou moins sophistiques." M. des Essarts in *Discussions de la Société d'Economie Politique*, 5th année, 1898.

⁸³ "Un instrument du nivellement universel" which "aboutit de lui-même à la spoliation" "on s'empare de lui pour réaliser l'égalité social par la suppression de l'hérédité et la confiscation des fortunes au delà du nécessaire.—R. Stourm, *Systèmes Généraux de l'Impôt*, 1893, p. 240.

⁸⁴ "Eine himmelschreiende Absurdität" suitable "für ein Gemeinwesen, welches von selbstmörderischen Tendenzen durchdrungen, die Annulierung des Privateigenthums und die Verwirklichung des Kommunismus unter heuchlerisch beschönigender Form herbeizuführen trachte"—Umpfenbach, *Lehrbuch der Finanzwissenschaft*, 1859.

Before considering these theories, however, it may be well to notice briefly the views of those who occupy a middle ground and who uphold progressive taxation for reasons not directly connected with either the socialistic or the so-called economic arguments. We come thus to what may be termed the compensatory theories of progressive taxation.

President Walker, for instance, bases his defense of progressive taxation on two considerations: first, "the undoubted fact that differences of property and income are due, in no small degree, to the failure of the state in its duty of protecting men against violence and fraud," and secondly, "that differences in wealth are, in a measure, due to the acts of the state itself, having no political purpose, as treaties of commerce, tariffs, currency legislation, embargoes, non-intercourse acts, wars, etc." He argues that where differences of wealth may fairly be presumed to be in a measure due to the state's own acts of omission or commission, allowance should be made therefor in the tax system.⁸⁵ He concludes that "were the highest human wisdom, with perfect disinterestedness, to frame a scheme of contribution, I must believe that the progressive principle would in some degree be admitted."

This defense of progressive taxation is in many respects interesting. It is, however, really not new with President Walker. Progressive taxation was first advocated at length on this ground in the remarkable work of a woman, Mlle. Royer, which was crowned by the Council of State of Vaud, in Switzerland, at the time of the great international convention on taxation in Lausanne in 1860.⁸⁶ Mlle. Royer takes the ground that it is the duty

⁸⁵ Walker, *Political Economy*, 1st ed., 1883, p. 479-480. In the 3rd edition (1888) these passages are omitted although the general conclusion is still retained.

⁸⁶ Five monographs out of forty-five received prizes,—those of

of the state to compensate individuals for the "accumulated results of legal iniquities," and that "the present ought to atone for the heritage of injustice bequeathed by the past." This can, however, in her opinion be accomplished only through some form of progressive taxation.⁸⁷

The same idea, in fact, is already found in the French writer Villiaumé, who upholds progressive taxation on the ground that "taxation ought to counterbalance the inequalities consecrated by custom and by law."⁸⁸ Another earnest advocate of the compensatory theory is the noted economist, Courcelle-Seneuil. Progressive taxation, says he, is in itself neither good nor bad. Up to a certain point it is highly desirable; beyond that it becomes pernicious. That is to say, since the possession of wealth obviously gives the rich many advantages over the poor, and since the legal conditions of society naturally favor the rich, a progressive tax which would attenuate and diminish these advantages of the rich would be desirable

Proudhon, Lassaut (a Parisian lawyer), Mlle. Royer, Professor Walras and M. Romiol. Proudhon, Walras and Mlle. Royer published their works, each of which will be noticed in the course of this discussion.

⁸⁷ The characteristic passages are as follows: "L'idéal de la justice distributive consiste à réparer les inégalités et les torts de la nature. Au contraire, dans le passé, la légalité si souvent contraire à la justice a toujours aggravé ces inégalités et ces torts. Il faut maintenant compenser avec lenteur et prudence ce que cette action de la loi a eu de fureste dans le passé." And again: "Dans le cas particulier où le présent doit réparer un héritage d'iniquité léguée par le passé, la proportion peut être plus ou moins progressive, suivant qu'on veut compenser plus ou moins rapidement, l'écart produit dans les conditions sociales par le fait de ces iniquités légales accumulées." Clémence Auguste Royer, *Theorie de l'Impôt ou la Dime Sociale*, 1862, i, p. 64. Cf. chap. iv, p. 47.

⁸⁸ "L'impôt doit contrebalancer les inégalités consacrées par les moeurs ou les lois." Villiaumé, *Nouveau Traité d'Economie Politique*, 1857, p. 137. See also 2nd edition (1866), pp. 238 and 244.

and equitable. To go beyond this limit, however, and to weaken the desire to acquire wealth would be in his opinion an irreparable misfortune.⁸⁹ It is true that Courcelle-Seneuil's ideal is a tax on consumption, rather than on income; but the fact remains that he favors the progressive scale for the reason noted.

The compensatory theory of progressive taxation, is however, not convincing. Its defect consists in the point to which President Walker himself alludes. It is useless as a standard. For it is clearly impossible to lay down any general principles by which this influence of the state in creating inequalities of fortune may be measured. If progression is regarded as an inequality, it is not permissible to correct one inequality by another, unless it could be shown that the second inequality would in every respect fit into, and counterbalance, the first. The test, in other words, is impracticable. If this were the sole defense of progressive taxation; it might be as well to abandon the contention at once. What are here termed the economic arguments have, however, not been alluded to by President Walker, although they are of far more importance.

Of a similar character, although of somewhat greater force, is the argument which upholds progression in some

⁸⁹ "Si la progression de l'impôt était telle qu'elle pût éteindre ou diminuer sensiblement le désir de s'enrichir, elle porterait un coup funeste et peut-être irréparable à la production. Mais si la progression était médiocre, elle compenserait à peine les avantages nombreux que l'appropriation par l'échange assure aux citoyens riches, et ne découragerait personne; elle ne rétablirait pas même l'égalité des conditions dans le concours ouvert entre les riches et les pauvres. . . . Le but de l'impôt progressif ne doit pas être de détruire, mais seulement de diminuer les avantages que procure naturellement aux riches sur les pauvres la possession d'une grande fortune." Courcelle-Seneuil, *Traité théorique et pratique d'Economie Politique*, 2nd ed., 1867, ii, p. 206.

one particular tax on the ground of its acting as a counterpoise to the influence of other taxes. When indirect taxes exist, they often, it is said, act regressively and hit the poor harder than the rich. The direct tax, with its progressive scale, is designed to act as an engine of reparation. In order to attain equal treatment the regressive indirect taxes must be counterbalanced by the progressive direct tax. This argument is occasionally found as a secondary plea with socialist writers. Such is for instance the case with Gilardeau who advocated what he calls the "impôt proportionnel-progressif" on the ground not only that a graduated scale is just in itself, but that the existing indirect taxes are regressive in their character.⁴⁰ In general however this is the favorite argument with those who seek to defend some particular progressive tax while yet upholding the general principle of proportion. With such writers, proportionality of taxation is still the real ideal, but the departure from proportional taxation in one direction must be met by an equal departure in the opposite direction. This argument might be termed the "special compensatory theory" as against the general compensatory theory. The general compensatory theory defends progression as a general principle; the special compensatory theory aims at proportion in general, but is willing to accept progression in some particular tax in order the better to realize the ultimate proportion.

This contention is undoubtedly of some force in tend-

* "Tous les impôts indirects existant aujourd'hui constituent réellement une rétrogression que l'on est assez disposé à maintenir, malgré son évidente iniquité. Ainsi l'impôt indirect, dont l'égalité n'est qu'apparente, agissant en sens inverse de l'impôt progressif ne frappe pas seulement le superflu, il touche en passant le nécessaire, et va atteindre ensuite la source même de la vie du pauvre et de leur travail."—Gilardeau, *De l'Impôt et du Crédit*, 1849, p. 44.

ing to justify a progressive income or property tax in practice without upholding general progression in theory. Some of the fiercest opponents of the general theory of progression favor a progressive income or property tax on this ground.

Among the earliest upholders of this doctrine is Riverieulx, who advocated a progressive land tax notwithstanding his conviction that progression in general was pernicious.⁴¹ So Nasse champions a progressive income tax as a compensation for the regressive taxes on expense which bring about an "umgekehrte Progression."⁴² The same is true of Scialoja.⁴³ The latest advocate of this doctrine is Gaston Gros.⁴⁴ So again a progressive rentals tax is frequently upheld as being in reality a proportional tax, because of the fact that as house rent decreases, its proportion to expenditure or income increases, especially in the middle and lower classes. Even such an ultra-conservative as Leroy-Beaulieu advocates progression here, without recognizing the fact that the argument is applicable to other taxes as well. Progressive taxation of this kind is therefore really taxation proportional to income or property.

Let us, however, pass over these arguments in favor of what may be called only ostensible progression, and consider the economic arguments that may be advanced for and against progressive taxation as a general theory.

The real contest between the principles of proportion and progression turns about the fundamental question as

⁴¹ Riverieulx, *De l'Impôt Territorial Gradué*, Conservateur de la Propriété, 1816, p. 14.

⁴² Nasse, *Gutachten über Personalbesteuerung*, in *Schriften des Vereins für Social politik*, iii, (1877), p. 14.

⁴³ Cf. Scialoja, *I Principi di Economia Sociale*, 1840, p. 246.

⁴⁴ He speaks of "ce caractère de redressement compensateur des injustices inhérentes aux taxes de consommation." Gaston Gros, *L'Impôt sur le Revenu*, 1907, p. 70.

to the basis of taxation—the theory of the benefits or the theory of ability. On the one hand we have the contention that a man should pay taxes in proportion to the benefits that accrue to him from the state—the so-called give-and-take, or *quid-pro-quo* doctrine, also known as the enjoyment, or bargain-and-sale, or exchange, or reciprocal, or social-dividend theory. Of this, minor variations are the protection and insurance-premium theories.⁴⁵ They all in last resort mean taxation according to benefits received, and we have hence summed them up under the name of the theory of benefits. On the other hand we have the doctrine that a man should pay taxes in accordance with his faculty or ability to pay, or contributive capacity; and as this faculty may be regarded from the two standpoints of production and consumption, it is to a certain extent affected by the degree of sacrifice which the taxpayer is called upon to make.

We must take it for granted in this place that the theory of benefits as the controlling principle in general taxation has been discarded in favor of the other theory. To prove this in detail, and to point out the considerations which limit the general theorem, would require a discussion which belongs rather to the general bases of taxation. The point which we desire to emphasize here is that the theory of benefits has usually led to the principle of proportion; and that the theory of the ability or sacri-

⁴⁵ The term *quid pro quo* was first used by J. S. Mill. The term "bargain-and-sale" theory is due to Henning, *A Just Income Tax, How Possible*, 1851, p. 5. The term "social-dividend" theory was adopted by Parieu, *Traité des Impôts*, 2d ed., 1886, i, p. 30, but is first found in Chauvet. The term "exchange" theory is due to Proudhon, who boldly declared "l'impôt est un échange." The term "enjoyment" theory (*Genuss-theorie*) is the one commonly used by the German writers. The term "reciprocal" or "reciprocity" theory is due to Cooley, *Law of Taxation*, p. 14, who speaks of taxation and protection as reciprocal.

fice has usually led to the principle of progression. This has, however, not been universally true. For in a few cases the theory of benefits has led to the principle of progression, while the theory of ability has sometimes led not only to the principle of proportion, but also to the principle of degression rather than of progression. It will be our function to subject these various theories and conclusions to a detailed criticism in order to ascertain, which, if any, is the defensible doctrine.

CHAPTER II.

THE BENEFIT THEORY.

The old doctrine of taxation was that of benefits. It held that taxes must stand in a definite relation to the advantages derived by the individual citizen. Since protection was generally regarded as the chief function of the state, the conclusion was drawn that taxes must be adjusted to the protection afforded. Taxes were looked upon as premiums of insurance which individuals paid to the collective insurance company—the state—in order to enjoy their possession in peace and security.

The natural conclusion from this doctrine was proportionality of taxation. The larger a man's property or income, the greater are the benefits that accrue to him from the protection of the state. An insurance company fixes its premiums in exact proportion to the value of the property; for the value of the property determines the extent of the risk. So in the same way the state must charge for its activities and exertions, proportioning each charge to the amount of its efforts, and measuring the expenditure of the effort by the exact amount of the property or the income protected. The logical outcome of this theory was declared to be the proportional taxation of all property or income.

This conclusion, however, was first modified, and then openly attacked. The modification consisted in the introduction of the theory of the exemption of the minimum of subsistence. As regards the property tax this took the shape of the demand of a proportional taxation not of all property, but of all property in excess of a definite minimum. As regards the income tax, the modification

was known as the clear-income theory of taxation. This theory was not much else than the acceptance of the Ricardian view of income. Ricardo says that "the power of paying taxes is in proportion to the net, and not in proportion to the gross revenue."¹ By net income he means gross income less expense of production. The advocates of the clear-income theory however, held that the laborers' outlay for necessities also constituted an expense of production. Hence the demand for the exemption of the minimum of subsistence. Moreover, some writers went further and extended the conception of clear income. They maintained that not only the necessary expenses of sheer subsistence, but also the expenses which contribute to maintain a standard of comfort, should be declared expenses of production. The amount of income exempted would thus be considerably larger. The excess, however, or the clear income over and above these expenses of production, should still be taxed proportionately, because of the benefit theory.² The taxable income is the clear income. Proportional taxation, therefore, means proportional taxation of clear income only.

It is plain that this is proportional taxation only in a very peculiar sense, and that proportional taxation of clear income, *i. e.*, income above a fixed minimum, is actually degressive taxation of total income. Thus without being aware of it many advocates of so-called propor-

¹ Ricardo, *Principles of Political Economy and Taxation*, chap. xxvi. For a history of the clear-income and total-income theory see Schmoller, "Die Lehre vom Einkommen in ihrem Zusammenhang mit den Grundprincipien der Steuerlehre," in *Tübinger Zeitschrift für die gesammte Staatswissenschaft*, vol. xix (1863), pp. 1-86. Cf. also Meyer, *Das Wesen des Einkommens*, 1887, introduction, pp. 1-28.

² This is not intended to convey the impression that all the advocates of the clear-income doctrine were believers in the give-and-take theory. We shall see later that this is not the case.

tional taxation really favor non-proportional taxation. It may be said, moreover, in criticism, that this idea of clear income is open to serious objection. For as soon as we extend the idea of minimum of subsistence so as to include a standard of comfort—that is, as soon as we claim that not only absolutely necessary, but also relatively necessary expenses should be deducted,—clear income or taxable income becomes a variable quantity, because a variable, rather than a fixed, minimum must be deducted in each case. Since wealthier individuals generally have a higher standard of life—for they consider almost as necessities what the poor regard as luxuries—it would follow that the wealthier a man is, the greater, up to a certain point, should be the amount exempted from taxation. Proportional taxation of clear income might in this case be regressive, in lieu of degressive, taxation of total income; it might actually tax the poor man more than the rich man. Clearly, therefore, if the idea of clear income be accepted at all, it must be restricted to the surplus above a fixed minimum of necessary subsistence.

Not only was the doctrine of proportional taxation modified in this way, but it was soon formally attacked, and from two sides. On the one hand the inadequacy of the basis was pointed out: it was affirmed that taxes cannot and should not be proportioned to benefits. On the other hand, while the basis was still upheld, the validity of the conclusion was impugned. That is, it was still asserted that taxes must be paid in accordance with benefits; but it was shown that benefits were not proportional to property or to income. Let us consider the last objection first, especially since it has been almost completely overlooked.

The benefits to the individual, said some writers, increase faster than his property or income. Most of the

public expenses are incurred to protect the rich against the poor, and therefore the rich ought to contribute not only actually, but relatively, more. Certain governmental expenses, other writers affirmed, confer an equal or proportional benefit on all; but there are many kinds of governmental outlay which have a special value for the rich, without losing their equal value for all. Others again confessed that the benefits of state action are theoretically enjoyed by all, but maintained that practically the benefits accrue only to the wealthier classes. Finally, some writers went so far as to invoke the aid of mathematics, and endeavored to prove that protection actually increases faster than property or income. The value of state protection to a man worth one million dollars is not ten times as much as its value to the man worth one hundred thousand dollars, but far more than ten times as much. The insurance argument, these writers assert, proves the contrary of what it is intended to prove. For insurance companies fix their premiums not only in proportion to the amount insured, but also according to the risks, so that the same amounts often pay different premiums. A million dollars belonging to one man is in greater risk of being stolen or pillaged than the same amount distributed among several men. Therefore the tax-rate or insurance premium ought to be higher. Thus from all these different points of view writers who firmly believe in the benefit theory are compelled, logically as they think, to demand progressive taxation.

The situation is a curious one. The benefit theory is usually regarded by its opponents as a narrow, extremely individualistic, almost atomistic, doctrine. The plea for progressive taxation is usually branded by the individualists as a socialistic argument. Yet here we have arch-individualists demanding what other individualists regard

arch-socialism. It is a remarkable outcome of individualism.

In reality, however, this defence of progressive taxation is not very strong. Far from being the fact that the rate of protection increases faster than property, the reverse is true. A man without any income or property at all may have more money spent on him in the police force than hundreds of men with moderate incomes. The millionaire who is able to hire his own watchmen, his own detectives, his own military guard, and who often relies more on his individual efforts than on the government for protection of his property, may cause the state less expense than the man of smaller means who must depend entirely on the government. The rich man sends his children to private schools and colleges, the poor man has his family educated in the public schools. The rich man has his street swept by a hired laborer, the poor man has it cleaned at the expense of the city. The activity of the state is up to a certain point subject to the law of increasing returns. If we are to have any comparison at all between state action and private business, the state may be compared to a railroad, whose business may increase considerably without entailing a proportionate increase of outlay, because of the fact that certain expenses are fixed, and certain variable charges. It does not cost the state ten times as much to settle a one thousand dollar lawsuit as it does to settle a one hundred dollar litigation. Certain expenses of government indeed vary with the value of the property, but the great majority increase in a less than proportionate ratio. From the standpoint of benefits conferred, who would have the hardihood to say that the poor man does not value the protection afforded to his person and property just as highly as the rich man? As we have just seen, he frequently values it far more highly,

because of his entire dependence on the state. Hence if protection or benefit is to be the sole test of taxation, the scale should be graduated downward, instead of upward; for neither the protection nor the benefits grow in proportion to the property or income. Logically, thus, it might seem that the poor man should then pay relatively more than the rich man.

This whole method of argument, however, is inconclusive. The question of advantages which an individual derives from governmental action is a psychological one. It does not logically lead either to proportion, or to progressive or to regressive taxation. The degree to which a taxpayer values the public art galleries, or the public concerts, or clean streets, or the decisions of the courts, or the thousand and one other benefits conferred by state action, depends on a multiplicity of motives which may differ in every individual case. A poor man may value them more, or he may value them less, than a rich man. Two equally rich men may value them in entirely different degrees. There is no exact and absolute measure of advantages. It is quite impossible to apportion to any individual his precise share in the benefits of governmental activity. The advantages are quantitatively immeasurable.⁸ Proportional taxation as a necessary outcome of the benefit theory is just as illogical as progressive taxation based on the same theory.

It is the force of this conclusion which has induced most of the recent writers to abandon the premises that made the conclusion possible. Some of the advocates of the give-and-take theory, however, sought to uphold the general doctrine on slightly different grounds. It was

⁸ Cf. the discussion of benefits as both the reason and the measure of taxation in the author's address on the single tax, in *The Single Tax Discussion, reported for the American Social Science Association*, 1890, pp. 40-44.

confessed that the protection theory or the insurance theory of taxation is indefensible. The partisans of the give-and-take theory, however, now maintained that taxes should be proportioned to the cost of service. Not the value of the protection to the individual, but the cost of the service to the government is the test. Every man must pay the state for such service just what it costs the state to afford that service. This is still the exchange or *quid-pro-quo* theory; but it is a variation from the untenable protection or insurance doctrine.

The cost-of-service theory, however, was soon found to be just as unsatisfactory as the other variations of the give-and-take theory. There is indeed no doubt that some payments made by individuals for particular services should represent as nearly as possible the cost of service to the government. In this all modern writers are agreed. Such payments, however, are not taxes. They are known in public finance as fees, or what Adam Smith called "particular contributions."⁴ Fees, however, are not taxes properly so called. For just as it is impossible to apportion taxes in general according to the criterion of protection or insurance, because it is impracticable to measure the exact benefits of general government activity accruing to the individual, so in the same way it is impossible to apportion taxes in general according to the cost of each particular service, because it is impracticable to separate the individual's share in the total cost of general state expenses. The cost-of-service theory is just as inadequate as the protection or insurance theory. They are both variations of an indefensible whole.

Thus the entire give-and-take principle came to be abandoned as the foundation for a scientific treatment of

⁴ Cf. the chapter on "The Classification of Public Revenues," in Seligman, *Essays in Taxation*, 5th ed., 1905.

taxation. When the theory of benefits, however, was discarded as the sole explanation of taxation, it became necessary to substitute for it another basis. In its stead there has been put the doctrine of ability or faculty. Every individual should be taxed in accordance with his faculty, or his ability to pay. The meaning ascribed to these terms and the conclusions to be drawn from this principle we shall learn later on. Let us first study more in detail the arguments of those that espouse the theory of benefits.

HISTORICAL APPENDIX I.

THE BENEFIT THEORY LEADS TO PROPORTION.¹

One of the first advocates of this doctrine was Hobbes. Hobbes' theory of taxation was an outgrowth of his general political principles. Since the state was simply a necessary escape from the original *bellum omnium contra omnes*, the revenues of the state, or taxes, must be regarded as the price paid for the peace purchased. Equality is the universal rule of taxation, but this equality means an equality of the burden, that is, an equality between the burdens imposed and the benefits received. The benefits conferred upon the individual are thus the real test of taxation. Taxes must be proportional to benefits and the chief benefit is the protection afforded.² It is

¹ A few of the writers discussed in these historical appendices are referred to in Held, *Die Einkommensteuer*, 1872, pp. 121-135, and in Neumann, "Die Steuer nach der Steuerfähigkeit," in *Jahrbücher für National-Oekonomie und Statistik*, vol. 35 (1880), p. 511. A fuller essay is that of Lehr, mentioned above, p. 2. Meyer's *Die Principien der gerechten Besteuerung*, 1884, contains a good history of some of the principles of taxation, including an account of progressive taxation, which must, however, be separated laboriously and piecemeal from the general discussion. These German writers pay but little attention to the French, and scarcely notice the English, Dutch and Italian literature which has become of considerable importance. The work of A. Charguéraud, *L'Economie Politique et l'Impôt*, 1864, is composed of a series of extracts from a few of the French authors. Chapters i, iii and xiv (de l'impôt, l'impôt progressif, l'impôt sur le revenu) will be found useful for comparison. The recent monograph of de Retz de Serviez, *De l'Impôt progressif dans l'Histoire de la France, de 1789 à 1870*, 1904, gives a longer series of extracts from some of the French writers. Cf. also the essay of Grabein mentioned on page 135.

² "Ad tollendam ergo justam querimoniam, quietis publicae interest, et per consequens ad officium pertinet imperantium ut onera publica aequaliter ferantur. Praeterea cum id quod a civibus in

significant, however, that Hobbes lays down the rule that the best test of benefits is not property or income, but expense. The theory of benefits thus resolves itself into a proportional tax on expense. "For what reason is there," says Hobbes, "that he which laboureth much, and sparing the fruits of his labor, consumeth little, should be more charged, than he that living idly, getteth little, and spendeth all he gets; seeing the one hath no more protection from the commonwealth than the other? But when the impositions are laid upon those things which men consume, every man payeth equally for what he useth, nor is the commonwealth defrauded by the luxurious waste of private men."⁸

Among the earliest defenders of the contract theory of the state was Hugo Grotius; his theory of taxation is hence simply the give-and-take doctrine. In one sense, therefore, Grotius may be declared the originator of the benefit theory. He devotes but little space to taxation,

publicum confertur, nihil aliud sit *praeter emptae pacis pretium*, rationis est ut ii qui aequae pacis participant, aequas partes solvant . . . Aequalitas autem hoc loco intelligitur non pecuniae sed oneris, hoc est aequalitas rationis *inter onera et beneficia*. Quamquam enim pace omnes aequaliter fruuntur, non tamen beneficia a pace omnibus aequalia sunt. Nam alii plus, alii minus acquirunt. Et rursus alii plus, alii minus consumant." *De Cive*, chap. xiii.

In the *Leviathan*, Hobbes repeats his view in English: "To Equall justice appertaineth also the Equall imposition of Taxes; the Equality whereof dependeth not on the Equality of riches, but on the Equality of the debt that every man oweth to the Commonwealth for his defence. . . . For the Impositions that are layd on the people by the Sovereign Power are nothing else but the Wages, due to them that hold the publique Sword, to defend private men in the exercise of severall Trades and Callings. . . . Which considered, the Equality of Imposition, consisteth rather in the Equality of that which is consumed, than of the riches of the persons that consume the same." Chap. 30, part 2, p. 181, of the 1651 edition. (Reprint of 1881, p. 270).

⁸ *Leviathan*, p. 271 of reprint of 1881.

but in a noteworthy passage, in which he discusses transit dues and tolls, he maintains that the burdens must be proportional to the benefits received in the shape of protection, and must not exceed this amount of benefit.⁴ Taxation is, therefore, the price of protection.

In the same way Pufendorf declares taxes to be nothing but the price of protection, although he does not accept expenses as the test. The principle, however, must be that of proportion.⁵ Many of the publicists of the following century simply repeat the same ideas.

When we come to the professed economists we find many of them taking the same view. The economist and statesman, Sully, had maintained as far back as the sixteenth century that taxes must be proportional to the benefits derived by the tax-payer and must, therefore, be in a direct ratio to his profits.⁶ So the great fiscal reformer, Vauban, held that every one needs the protection of the state, that the prince cannot protect his subjects without

⁴"Quaeritur an ita transeuntibus mercibus terra aut amne, aut parte maris quas terrae accessio dici potest, vectigalia imponi possint ab eo, qui in terra imperium habet. Certe quaecunque onera ad illas merces nullam habent respectum, ea mercibus istis imponi nulla aequitas patitur. Sic nec capitatio, civibus imposita ad sustentanda reipublicae onera ab exteris transeuntibus exigere potest. Sed si ad praestandam securitatem mercibus aut inter caetera etiam ob hoc onera sustinentur, ad ea compensanda vectigal aliquod mercibus potest, dum modus causae non excedatur." Hugo Grotius, *De Jure Belli ac Pacis*, 1625, lib. ii, cap. 2, §14, 1.

⁵"Tributa nihil aliud atque merces quam singuli pendunt civitati pro defensione salutis et bonorum." Pufendorf, *De Jure Naturae et Gentium*, book vii, chap. v, p. 6. In his essay in the *Jahrbücher für Nationalökonomie*, mentioned above, Professor Neumann has collected a number of similar statements from the German and Dutch publicists of the 17th and 18th centuries.

⁶"L'impôt ne devrait être que la mise apportée par chaque individu dans la vie civile pour avoir part à ses bienfaits; il devrait être proportionné aux avantages qu'en retire le contribuable et prélevé sur ces bénéfices." Sully, quoted in De Girardin, *L'Impôt*, 1852, p. 150.

adequate funds, and that therefore everyone is under a natural obligation to pay taxes proportionally to his revenue.⁷ It is true, indeed, that Vauban laid down these rules in order to enforce his great doctrine of universality of taxation, and that but little exception can be taken to his manner of statement; but the fact remains that he based his reasons on the theory of benefits, and deduced from this the doctrine of proportional taxation.

The earliest English scientific writer on taxation is Sir William Petty. Petty advances the benefit theory in the following words: "It is generally allowed by all that men should contribute to the Publick charge but according to the share and interest they have in the Publick Place; that is according to their Estates and Riches."⁸ But Petty goes on to show that this demand of proportional taxation means a tax proportional to expense, "since there are two sorts of riches, one actual and one potential." His conclusion from the principle of benefits is, that it is "natural

⁷ Vauban's *Maximes Fondamentales* are as follows:

"I. Il est d'une évidence certaine et reconnue par tout ce qu'il y a de peuples policés dans le monde, que tous les sujets d'un Etat ont besoin de sa *protection*, sans laquelle ils n'y sauraient subsister.

II. Que le prince, chef et souverain de cet Etat, ne peut donner cette protection si ses sujets ne lui en fournissent les moyens, d'où s'ensuit:

III. Qu'un Etat ne peut se soutenir, si les sujets ne le soutiennent. Or, ce soutien comprend tous les besoins de l'Etat, auxquels, par conséquent, tous les sujets sont obligés de contribuer. *De cette nécessité* il résulte:

Une obligation naturelle aux sujets de toutes conditions, de contribuer à proportion de leur revenu ou de leur industrie."—Vauban, *Dime Royale*, p. 1707. In *Economistes Financiers du xviii siècle* (ed. Daire, 1843), p. 47.—"Il est raisonnable que tous contribuent selon leurs revenus." *Ibid.*, p. 56.

⁸ Petty, *A Treatise of Taxes and Contributions*, 1677, chap. xv, p. 68. Petty uses the phrase, "ability to pay," when speaking of the poll tax. *Ibid.*, p. 43.

justice that every man should pay according to what he actually enjoyeth."⁹

The Physiocrats were all advocates of the theory of benefits and of proportional taxation, although their practical proposal was a single tax on land. Quesnay has not much to say about the philosophic basis of taxation, but he maintains that the best tax is that which is proportional to net produce.¹⁰ To some it might appear doubtful whether the Physiocrats based their conclusions on the theory of benefits. This doubt, however, is soon dispelled when we remember the views of important members of the school like Turgot and the elder Mirabeau. Turgot held that taxation should be proportional to the benefits derived by the individual from the action of the state.¹¹ Moreover, we must not forget his answer to the demand of an enthusiast for progressive taxation: "We must execute the author and not the project."¹² Mirabeau the elder said that a tax is a payment made by the individual in return for the protection afforded by government since the expenses incurred by the state simply assure to the citizens an equivalent for what they give.¹³ Taxes must

⁹ Petty, *op cit.*, chap. xv, p. 72.

¹⁰ "La forme d'imposition la plus simple . . . est celle qui est établie *proportionnellement* au produit net." Quesnay, *Notes sur les Maximes Fondamentales*, etc. *Maxime V.* In *Oeuvres Economiques*, ed. Oncken (1888), p. 339.

¹¹ "L'impôt ne devrait être que la mise apportée par chaque individu dans la vie civile pour avoir part à ses bienfaits; et devrait se proportionner aux avantages qu'en rétire le contribuable." Quoted by Gandillot, *Principes de la Science des Finances*, i, 208. I have been unable to find this particular sentence in my edition of Turgot. As this is the same quotation as that on page 722, note 6, ascribed by de Girardin to Sully, I suspect that Gandillot has made a mistake. But that it correctly represents the general trend of Turgot's thought I do not doubt. Cf. Turgot's general views in his *Oeuvres*, (Daire's ed.), i, pp. 392-444.

¹² Cf. above, p. 141.

¹³ "La contribution du Particulier n'est autre chose que le service

hence be proportional to the revenue of the citizens (although like the other Physiocrats he found this proportion chiefly in the single land tax).

Montesquieu's definition is well known: "The revenues of the state are a part of his property which each citizen gives in order to be sure of the other part, or in order to enjoy it in comfort."¹⁴ While Montesquieu, however, thus advocates the protection theory, he defends the progressive principle, as we shall see later, for other reasons. The definition of Raynal is approximately the same: "Taxes are the sacrifice of a part of one's property for the protection and conservation of the rest."¹⁵ In the same way Montyon contends that the sacrifice of a part guarantees the whole, and that taxation is simply an investment which bears interest. But Montyon, like Montesquieu, defends progressive taxation on other grounds, which will be discussed hereafter.¹⁶

qu'il rend au Public; comme aussi la dépense du Public n'est autre chose que la tutelle des Particuliers, ou la sûreté de l'équivalent qui doit leur revenir." Mirabeau, *Theorie de l'Impôt*, 1761, p. 336. He maintains hence "que l'imposition soit dans une proportion connue et convenable avec les revenus," *ibid.*, p. 374, and explains this further by showing that the tax must be levied on land and also "proportionnellement aux logemens ou loyers d'habitation," *ibid.*, p. 392. Mirabeau's statement, *ibid.*, p. 39, "que le riche doit contribuer beaucoup plus que le pauvre et coûter beaucoup moins, proportion gardée," cannot be taken as a demand for progressive taxation. Garnier, *Traité des Finances*, p. 355, makes a mistake here in calling Mirabeau an advocate of progression. The same error is committed by de Retz de Serviez, *De l'Impôt Progressif en France*, p. 40.

¹⁴"Les revenus de l'Etat sont une portion que chaque citoyen donne de son bien pour avoir la sûreté de l'autre, ou pour en jouir agréablement." Montesquieu, *L'Esprit des Loix*, 1748, livre 13, chap. 1.

¹⁵"L'impôt peut être défini la sacrifice d'une partie de la propriété pour la défense et la conservation de l'autre." Raynal, *Histoire Philosophique et Politique des Etablissements et du Commerce des Européens dans les deux Indes*, 1780, vol. iv, book 19, chap. x, p. 636.

¹⁶"Si l'impôt distrair une portion de la propriété privée pour la

The chief German writers on public finance prior to Adam Smith held that the doctrine of proportion was a logical conclusion from the principle of benefits. Thus Justi maintains that since the man with more property enjoys more protection, everybody must pay taxes in proportion to his property. Equality of taxation arises from the fact that all citizens enjoy equal protection, security and justice. The equality, however, must follow, not the person, but the property. For the richer a man is, the greater the protection and security that he enjoys.¹⁷

Adam Smith has been claimed as a defender both of the benefit and of the faculty theory, both of the proportional and of the progressive doctrine. It is true that he is not always consistent, and that isolated passages may be taken to prove either view. A careful consideration of the general trend of his ideas, however, must convince us that Adam Smith held in the main to the benefit theory and to proportional taxation. These are virtually contained in his famous principle that: "The subjects of every state ought to contribute towards the support of the government, as nearly as possible in proportion to their respective abilities, that is in proportion to the revenue

transférer à la propriété publique, le sacrifice de cette portion paie la garantie de la totalité. Dans la réalité le contribuable, en acquittant le tribut qui lui est imposé, ne fait qu'un placement d'argent dont il tire un fort intérêt." Montyon, *Quelle Influence ont les diverses Espèces d'Impôts sur la Moralité, l'Activité et l'Industrie des Peuples*, 1808. In *Mélanges d'Economie Politique* (ed. Guillaumin, 1848), ii, p. 375.

"Alle Unterthanen haben an dem Schutz des Staats und andern . . . Wohlthaten gleichen Antheil. Wenn aber diese gerechte Gleichheit beobachtet werden soll, so muss vornehmlich die Proportion des Vermögens zum Grunde gelegt werden, weil sich der Schutz des Staats hauptsächlich in Ansehung des Vermögens zeigt, und weil Derjenige, der ein grosses Vermögen besitzt, ohne Zweifel mehr Schutz genießt als Derjenige, der ein geringes oder gar kein Vermögen hat." Justi, *Staatswirthschaft*, 1755, Zweiter Theil, § 228, 2nd ed. (1758), p. 312.

which they respectively enjoy under the protection of the state."¹⁸ That is to say, although he uses the word "ability" he immediately goes on to explain that taxation should be proportioned to the benefits received in the way of income. Although he says in another part of the same chapter: "It is not very unreasonable that the rich should contribute to the public expense not only in proportion to their revenue, but something more than in proportion,"¹⁹ yet this sentence did not lead him to demand progressive taxation at all, and must be regarded as a mere incidental remark. Adam Smith upheld proportional taxation because, as he said, "the expense of government to the individuals of a great nation is like the expense of management to the joint tenants of a great estate, who are all obliged to contribute in proportion to their respective interests in the estate."²⁰ This is essentially the individualistic or the give-and-take theory.

Most of the English writers until the middle of the century show the influence of Adam Smith in this respect. The Bishop of Llandaff is interesting as being the first Englishman to advance the insurance-premium theory of taxation, later associated with the name of Thiers. He states that the true principle of taxation "seems to me to be this, that every man should pay for the protection of his property by the state in exact proportion to the value of the property protected; just as merchants who risk their goods on board a vessel pay an insurance in proportion to the value of the goods insured."²¹ Many years later Mc-

¹⁸ Adam Smith, *Wealth of Nations*, book v, chap. ii; Rogers ed. ii, p. 414.

¹⁹ *Ibid.*, ii, p. 435. He is speaking of a proportional tax on house-rents, which he thinks falls heaviest on the rich, but which is nevertheless quite justifiable for the reason indicated.

²⁰ *Ibid.*, ii, p. 415.

²¹ Quoted in Frend, *The Principles of Taxation, or Contribution according to Means*, 1804, p. 16.

Culloch based his demand of proportional taxation on this same insurance-premium theory. "The state has been ingeniously compared by M. Thiers to a mutual insurance company where the payments by the members are exactly proportioned to the sums that they have insured, or to their interests in the company. And so it should be with the subjects of government. . . . It follows that every one should contribute to its support according to his stake in the society or his means. This is a plain intelligible rule, that should neither be forgotten nor overlooked."²² McCulloch goes on to explain his meaning by saying that "no tax on incomes can be a just tax unless it leaves individuals in the same relative condition in which it found them." This, however, he thinks, involves proportional taxation. "Even if taxes on incomes were otherwise the most unexceptionable, the adoption of the principle of graduation would make them among the very worst that could be devised. The moment you abandon, in the framing of such taxes, the cardinal principle of exacting from all individuals the same proportion of their income or their property, you are at sea without rudder or compass, and there is no amount of injustice and folly you may not commit."²³ This insistence upon "injustice" is remarkable in the case of a writer who main-

²² J. R. McCulloch, *A Treatise on the Principles and Practical Influence of Taxation, or the Funding System*, 1845, 3rd ed. (1863), p. 17.

²³ *Ibid.*, pp. 143-145. Similar ideas were expressed by McCulloch in very much the same words in an anonymous article in the *Edinburgh Review*, vol. 57 (1833), p. 143. President Walker, who quotes the article in his *Political Economy*, § 590, does not seem to be aware that the article is written by McCulloch. But neither the idea nor the phrasing is original with McCulloch. It is found almost word for word in Frensdorff, *The Principle of Taxation* (1804), 40; as well as in some of the German writers, like Schlözer, in 1807. These will be mentioned below.

tains, in another part of the same work, that a statesman in levying taxes need not concern himself about the equities at all, but look only to the expediency and convenience of collection. This leave-them-as-you-find-them theory, as it might be called, does not, however, as we shall see later, necessarily lead to proportional taxation.

Senior puts the give-and-take theory in somewhat less exceptionable form, when he says: "We consider all that is received by the officers of government as given in exchange for services affording protection, more or less complete, against foreign or domestic violence or fraud. It is true that this exchange is conducted on peculiar principles. . . . No individual is permitted to refuse his share of the general contribution, though he should disclaim his share in the general protection. But the transaction, though often involuntary and still more often inequitable, is still an exchange and on the whole a beneficial exchange. The worst and most inefficient government affords its subjects a cheaper and more effectual protection than they could obtain by their individual and unaided exertions."²⁴

By all means the strongest plea in English literature for proportional taxation as the outcome of the give-and-take theory is to be found in the writings of Sargent. Sargent, however, is the chief advocate of the cost-of-service theory as over against the value-of-service theory. He pictures the gradual development of a community from barbarism to civilization. "In all these cases there is one simple principle by which the contribution of each colonist is determined; every one pays in proportion to the expense incurred by government in protecting him. Just as he pays the storekeeper for the goods he buys, the lawyer for the advice he asks, the ploughman for the labor he

²⁴ Senior, *Political Economy*, 1836, 6th ed. (1872), p. 87.

hires, so he pays the government for the protection he receives; and the amount he contributes is not regulated by the colonist's ability to pay, but by the cost incurred by government on his behalf. This principle has been overlooked or slighted, in most, if not in all, the reasonings I have seen. It has been stated, indeed, that a man pays for the protection he receives; but it has not been stated that, in the first instance, the amount he pays is only a reimbursement of the expense incurred by Government on his behalf."²⁵

Sargent is mistaken, as we shall see, in his belief that the theory had not been advanced previously. It is noteworthy, however, that he declares this principle the only avenue of escape from progressive taxation.

He puts his idea in the following words: "If this principle, of proportion between government cost and individual taxation, be not the foundation of just taxation, what is the foundation? And what other defense have we against graduation? . . . The very name graduation stinks in the nostrils of wealthy men. Why is graduation an indefensible confiscation? Why is graduation an indefensible part of socialism? Because, I reply, graduation is unjust; because graduation is a filching from rich men a payment for that which they do not receive; because it is a demand on rich men to pay a shilling for the loaf which men of moderate means get for ninepence!"²⁶ The principle of justice is the rule that each man should pay for government protection just as he pays for the commodities he buys. "Every one ought to reimburse to the government that part of the necessary expen-

²⁵ William Lucas Sargent, "An Undiscriminating Income Tax Reconsidered," in *Journal of the Statistical Society*, vol. 25 (1862), p. 341.

²⁶ *Ibid.*, p. 352.

diture which is incurred on his behalf."²⁷ This to Sargant means a proportional income tax.

The French writers of the nineteenth century, with only a few exceptions and until recently, have been strong advocates of the benefit theory. Already at the outbreak of the French Revolution, Mirabeau the younger drew up a report which was spread broadcast by the constituent assembly, in which he maintained that "taxation is a kind of compensation, the price of the benefits which society procures for its members. A tax is simply an advance made to secure the protection of the social order, and therefore a condition imposed on every one by all."²⁸ Later on, indeed, the revolutionists demanded progression, but that was only after another basis had been found for taxation.

Coming to the middle of the century, we find the great apostle of the protection or insurance theory in Thiers. Thiers maintains that every one must pay proportionally to his earnings or his fortune for the "most natural reason that the cost of protection must be shared according to the amount of property protected."²⁹ Progressive taxation he thinks is absurd. If you buy one hundred pounds

²⁷ *Ibid.*, p. 376. It is true that Sargant afterwards recommends the exemption of the minimum of subsistence; but this he says is not justice, but mercy. It is clearly illogical from his "cost-of-service" standpoint.

²⁸ "L'impôt est une dette commune des citoyens, une espèce de dédommagement et le prix des avantages que la société leur procure. . . . L'impôt ne sera plus qu'une avance pour obtenir la protection de l'ordre social, une condition imposée à chacun pour tous." *Ahsemblée Nationale*, 1789, *Address aux Français sur la Contribution Patriotique*, written by Mirabeau.

²⁹ "Chacun doit contribuer aux dépenses publiques en proportion nullement à ce qu'il gagne ou à ce qu'il possède, par la raison fort naturelle que l'on doit concourir aux frais de la protection sociale suivant la quantité de biens protégés." Thiers, *De la Propriété* (1848), p. 352.

of some commodity from a merchant you pay for a hundred; if you buy one thousand pounds, you pay for a thousand. "Would you find it natural to be charged more per pound if you buy 1,000 than if you buy 100? On the contrary, the merchant or the company will generally let you have the larger quantity at a cheaper rate, because of the greater profits. . . . But what is society if not a stock company, in which everyone has more or less shares?"⁸⁰ He concludes that taxes must be "proportional to the expenses incurred by the state in your behalf, and to the benefits you have received, just as in an insurance company the premium is proportioned to the [amount insured]."⁸¹ Anything else would be "revolting arbitrariness."⁸² Thiers, we see, combines the cost-of-service with the value-of-service theory, not seeing that they are really inconsistent. In much the same way Du Puynode defines a tax as a "part set aside by everybody for the common purse in order to guarantee the peaceful enjoyment of his property and the respect of his person."⁸³ Hence taxes must be proportional. "Do two hundred francs of income require a greater guarantee, a more difficult protection when they belong to one man, than when they are divided between two or three? Evi-

⁸⁰ "Qu'est-ce donc que la société, sinon une compagnie, où chacun a plus moins d'actions, et où il est juste que chacun paye en raison du nombre de celles qu'il possède." Thiers, *op. cit.*, p. 355.

⁸¹ "Ainsi l'impôt proportionnel c'est-à-dire l'impôt proportionné à la part des frais que la société est supposée avoir fait pour vous, au service que vous en avez reçu, comme en matière d'assurances la prime est proportionné à la somme assurée, rien de mieux; j'aperçois là un principe." *Ibid.*, p. 363.

⁸² "Un arbitraire révoltant." *Op. cit.*, p. 364. "La proportionnalité est un principe, la progression n'est qu'un odieux arbitraire." *Ibid.*, p. 362.

⁸³ "Aussi l'impôt peut-il encore se définir la part que chacun remet à la caisse commune, pour s'assurer la paisible jouissance de ses biens et le respect de sa personne." Du Puynode, *De la Monnaie, du Crédit, et de l'Impôt*, 1853, ii, p. 70.

dently not. Proportionality is the rule of all insurance policies."⁸⁴ Emile de Girardin is a strong believer in the insurance theory. "Every tax which is not the guarantee of a risk, the price paid for a commodity, or the equivalent of a service, is a tax which ought to be abandoned."⁸⁵ In another place he defines taxation as the "premium of insurance paid by those who possess in order to insure themselves against all risks of a nature likely to trouble them in their possessions or enjoyments."⁸⁶ Girardin thus concludes that the *impôt inique*, or unjust tax, as it exists to-day must be replaced by the *impôt unique*, or single tax, and this single tax is nothing but a "voluntary insurance premium, proportional to the value of the property insured."⁸⁷

So also Baudrillart, in a widely read manual, maintains that the remuneration must be proportioned to the service, and that it is quite right to compare taxation to a fire insurance premium, the "natural and just principle of

⁸⁴ "Deux cents francs de revenu, exigent- ils une garantie plus forte, une garde plus difficile quand un seul les perçoit que lorsqu'ils reviennent à deux, et à deux ou à trois? Evidemment non. La proportionnalité est la règle de toutes les polices d'assurances." Du Puynode, *op. cit.*, ii, p. 92.

⁸⁵ "Tout impôt qui n'est pas la garantie d'un risque, le prix d'une marchandise ou l'équivalent d'un service est un impôt qui doit être abandonné." Emile de Girardin, *L'Impôt*, 1852, p. 156. This whole discussion was first written during the revolution of 1848 and was printed in the work entitled *Les 1852. XIII Le Socialisme et l'Impôt*, 1849. Cf. the passage quoted on p. 120 of that work. Cf. also the reprint of the same author's views in Girardin, *L'Impôt Inique et l'Impôt Unique*, 1872, p. 89.

⁸⁶ "Tel que nous le comprenons, l'impôt doit être la prime d'assurance, payée par ceux qui possèdent, pour s'assurer contre tous les risques de nature à les troubler dans leur possession ou leur jouissance." *Ibid.*, p. 249.

⁸⁷ "L'impôt forcé est transformé en prime volontaire d'assurance proportionnelle à la valeur des objets assurés." It is voluntary because "point de capital, point d'impôt." *Ibid.*, pp. 300-301.

which is to guarantee risks in proportion to value. Proportional, not progressive, taxation, is, therefore, the true ideal."³⁸ Other writers also harp on the same key. For instance, Chauvet is the first to develop what he calls the social-dividend theory. He holds, that society owes to every individual a dividend (in the shape of benefits) proportional to what he pays. "The taxpayers are simply shareholders to each of whom the social body must distribute proportionate profits."³⁹ Ginoulhiac advances the same idea when he asserts that "taxes are not a burden, but a portion of produce set aside for the state in virtue of, and as a return for, its coöperation."⁴⁰

Proudhon indeed strongly opposes the insurance theory—what he calls *l'impôt assurance*—but he substantially holds to the give-and-take doctrine in defining a tax as the "portion to be paid by each citizen for the cost of public services. Taxation is an exchange."⁴¹ Proud-

³⁸ "Le principe, comme dans une compagnie d'assurance contre l'incendie, le principe naturel et juste est de payer le risque en proportion de la valeur garantie, et quelle que soit la nature de cette valeur. . . . L'équité véritable, c'est le paiement proportionnel au risque couru, à la quantité des biens garantis. . . . L'impôt doit donc être proportionnel; tel est en matière de taxation le véritable idéal." H. Baudrillart, *Manuel d'Economie Politique*, 1857, i, 5th ed. (1883), pp. 515-517. Cf. his *Economie Politique Populaire*, 2nd ed. (1876), p. 318.

³⁹ "La contribution est une mise que fait chaque individu dans l'espérance légitime de retirer de son emploi une utilité proportionnelle, d' où il suit que la société doit en avantages et en jouissances, à chaque contribuable, un *dividende* proportionnel à sa contribution. Les contribuables sont donc comme des actionnaires de toutes les opérations publiques, à chacun desquels le corps social devrait distribuer une somme d'avantages proportionnels à sa mise." Quoted in Girardin, *L'Impôt*, 1852, p. 155.

⁴⁰ "L'impôt n' est pas une charge, c'est une part des produits accordée à l'état, en vertu de sa coöperation." Kinoulhiac, *L'Economie Politique du Peuple*, p. 321.

⁴¹ "L'impôt est la quote-part à payer par chaque citoyen pour la

hon has a great many hard words for progressive taxation. He calls it "a pure hypocrisy, a cowardly and shameful transaction, a delusion, a suicide, a confiscation, a mystification, a fiscal plaything, the essence of arbitrariness without check or limit, the most stupid and unworthy of cheats," etc.⁴² His arguments, however, are all based on the assumption that taxes are inevitably shifted to the consumers, and that progressivity is hence a delusion. Although he states in another part that the idea of proportional taxation conforms to the principle of give and take,⁴³ the opponents of progression, who often quote him, must remember that Proudhon afterwards declares proportional taxation equally bad, because proportional taxation is really regressive taxation or "progressive taxation in the sense of misery."⁴⁴ This constitutes one of his famous "economic contradictions," which leads him to the conclusion that taxation in society as it is constituted to-day can never be just. Proudhon, however, cannot be claimed as an authority by anybody, because his opinions so often shifted. Thus, in his celebrated speech of 1848, in the debate in the French assembly, he upholds

dépense des services publics. . . . L'impôt est un échange." Proudhon, *Théorie de l'Impôt*, 1861, p. 39; new ed. of 1868, p. 40.

⁴² Proudhon, *Système des Contradictions Economiques*, 1845, chap. vii; *Théorie de l'Impôt*, chap. iv, § 117 (pp. 9, 185, etc). He concludes, "Quand donc cessera-t-on d'entretenir le public de ce bilboquet de la progression, qui n' a été imaginé que pour donner un vernis de philanthropie à l'impôt et ménager la pudeur des riches." *Contradictions Economiques*, p. 240.

⁴³ "De là l'idée que l'impôt, devant être payé par chacun, doit être proportionnel à sa fortune; idée conforme au principe de l'échange." *Théorie de l'Impôt*, pp. 113, 114.

⁴⁴ "L'impôt, direct ou indirect, proportionnel dans la forme, se résout fatalement en une capitation générale laquelle n'ayant, ni ne pouvant avoir, égard aux différences de la fortune, constitue un véritable impôt progressif dans le sens de la misère." *Ibid.*, p. 171.

progressive taxation in general,⁴⁵ and even in his later book on taxation, he defends the progressive tax on collateral inheritances, on buildings, on stamps, etc.⁴⁶ The important point for us is, however, that in so far as Proudhon upholds proportional taxation at all, it is as a result of the benefit theory.

Even among some of the more recent French writers the defense of proportional taxation resting on the benefit theory, is still common. Thus Dupont and Batbie claim that since the government protects both persons and property, the tax must logically be composed of two parts—a poll tax equal for all, and a second tax proportional to property or income.⁴⁷ Michaud and Le Hardy de Beaulieu advocate the proportional tax on net income, because this is the best test of the services received from the state in the shape of protection.⁴⁸

The most noteworthy of recent French writers is Leroy-Beaulieu. Leroy-Beaulieu is a stalwart opponent of progressive taxation. It is true that, in discussing the general nature of taxation, he shows the complete fallacy of the protection or insurance theory of taxation. When

⁴⁵ "Discours prononcé à l'assemblée nationale le 31 Juillet, 1848. In his *Oeuvres*, vii, esp. p. 275.

⁴⁶ *Théorie de l'impôt*, pp. 272-273.

⁴⁷ "Tous les citoyens, riches ou pauvres, doivent un impôt à l'Etat qui garantit la sûreté et la liberté de chacun; tous ceux qui possèdent doivent un impôt corrélatif à l'importance vraie ou supposée de leurs biens, comme rémunération de l'action protectrice exercée par l'Etat." Etienne Dupont, *L'impôt*, 1872, p. 6. "Que l'on soit riche ou pauvre, on recoit de la société une utilité égale sous le rapport de la protection accordée à la personne; l'inégalité des fortunes fait, au contraire, qu'au point de vue de la protection des biens les dépenses publiques profitent inégalement aux contribuables." Batbie, *Nouveau Cours d'Economie Politique*, 1866, ii, p. 225.

⁴⁸ "L'impôt proportionnel sur le revenu net est correspondant aux services reçus de l'Etat sous forme de protection." Michaud, *L'impôt*, 1885, p. 196. Cf. Le Hardy de Beaulieu, *Traité Elementaire d'Economie Politique*, 2nd ed. (1866), p. 295.

he treats of progressive taxation, however, he discards the equality-of-service, or the faculty theory (because he thinks it logically leads to progressivity), and maintains that it is the function of the state not to impose equality of sacrifice, but to recover from each citizen "the just price of service rendered and their just part in the interest and payment of the national debt."⁴⁹ He repeats the old question which we have encountered so frequently: "What should we say of a baker or grocer, or any merchant who would demand for the same commodities a price varying with the wealth of the purchaser?"⁵⁰ Thus Leroy-Beaulieu reverts to the benefit theory and makes it the basis of his objection to progressive taxation. A little later he upholds the progressive rate in the rentals tax, and the exemption of the minimum of subsistence from the income tax, but in both cases the progression is to him only apparent, not real. The progressive rental is nothing more than a presumption of proportional income; and the exemption of the lower income or the nominally degressive tax is simply a compensation for the regressive indirect taxes. So that proportional taxation is the ideal. The point to be noticed, however, is that the basis of proportional taxation with Leroy-Beaulieu is still the benefit theory, the same theory which he so hotly opposes in a preceding chapter. More recently still, Bonnet, who also starts out with objecting to the give-and-take theory of taxation, is equally illogical in making this very theory his main defense of proportional taxation.⁵¹ Beau-

* "Il ne s'agit nullement pour l'Etat d'infliger des sacrifices plus ou moins égaux aux individus, mais bien de recouvrir de chacun d'eux le juste prix des services rendues et leur juste part dans les intérêts et l'amortissement de la dette nationale." Leroy-Beaulieu, *Traité des Finances*, 5th ed. (1892), i, p. 146.

"Ne dirait-on pas que ce système est absurde?"

"Un abaissement de prix correspondant à la diminution des frais qu'on procure, telle est la loi générale du commerce; elle est

regard also objects to progressive taxation on the ground that it does not proportion the burden to the benefits received.⁵²

The German writers on public finance during this century—and their name is legion—were for a long time under the spell of Adam Smith and the early French authors, and were in consequence firm supporters of the benefit theory. In the writings of the chief publicists we find all shades of the doctrine expressed—the protection theory, the insurance theory, the cost-of-service theory, and the value-of-service theory, leading generally to the demand for proportional taxation.

One of the earliest writers, Schlözer, shares with the Englishman already quoted the doubtful honor (generally ascribed to Thiers), of being the first to advance the insurance-premium theory.⁵³ So Harl, the naive enthusiast for the general property tax, discusses the income tax as well and demands proportional taxation as self-evident. "Progressive taxation is not only against all justice, but against the nature of things."⁵⁴ Sartorius makes the objection which afterwards became so common,

équitable et favorise le progrès économique. Pourquoi ne l'applique-t-on pas en ce qui concerne l'Etat. . . . Mais si le gouvernement ne crée pas une échelle d'impôt décroissante en raison des sommes qu' on à payer, qu' on n'aille pas au moins lui demander d'en établir une progressive; ce serait le renversement de toutes les lois." Victor Bonnet, *La Question des Impôts*, 1879, p. 44.

"Il est injuste car il ne proportionne pas la charge au bénéfice obtenu." P. Beauregard, *Eléments d'Economie Politique*, 313.

"In dieser Rücksicht könnte man die Steuern mit den unter Kaufleuten üblichen Assecuranz-prämien vergleichen." Christian von Schlözer, *Anfangsgründe der Staatswirthschaft*, ii (1870), p. 157. See above p. 96.

"Es ist nicht nur gegen alle Gerechtigkeit, sondern selbst gegen die Natur der Sache, wenn . . . eine Steigerung der Procente angenommen wird." Harl, *Vollständiges theoretisch-praktisches Handbuch der gesammten Steuer-Regulirungen oder der . . . Steuerwissenschaft*, ii (1816), § 73.

that progressive taxation must finally swallow up the total income of the rich.⁵⁵ Kröncke says that taxes can be levied only in proportion to the security afforded by the state to property or income, and thinks that this means a proportional tax on all property or income.⁵⁶ Krehl, Kessler and Kremer take substantially the same position.⁵⁷ Later on Rotteck also maintains that the ideal principle of taxation is to apportion taxes according to each man's share in the benefits of the state, and that the nearest practical approach to this is a tax proportional to property or income.⁵⁸

Even during the third quarter of this century the give-and-take theory has been upheld in all its boldness by the German writers of the so-called Manchester school. Thus Faucher calls the give-and-take doctrine the principle of liberty as against the "communistic" faculty theory, and demands the pure property tax as the real premium of

⁵⁵ "Wollte man ein solches Steigen der Procente. . . . stattfinden lassen, so würde nothwendig erfolgen, dass der welcher das grösste Einkommen besäze, zuletzt nichts behielte." Sartorius, *Ueber die gleiche Besteuerung . . . des Königreiches Hannover*, 1815, p. 288.

⁵⁶ "Die Steuern können also nur im Verhältnisse der durch den Staat erlangten Sicherheit des Vermögens oder Einkommens rechtlich vertheilt werden." . . . "Nicht bloss die Ueberschüsse des Einkommens, oder das relative Einkommen und relative Vermögen, sondern das positive Einkommen und Vermögen muss als Massstab zur Vertheilung der Staatsbedürfnisse angenommen werden." E. Kröncke, *Ueber die Grundsätze einer gerechten Besteuerung*, 1819, pp. 9, 11. Cf. similar utterances in his *Ausführliche Anleitung zur Regulirung der Steuern*, 1810, § 15, p. 21.

⁵⁷ Krehl, *Skizze eines Steuersystems*, 1814, § 14, and *Steuersystem*, 1816, § 71; Kessler, *Die Abgabekunde*, 1818, *passim*; Kremer, *Darstellung des Steuerwesens*, 1825, § 82.

⁵⁸ "Die Beiträge müssen nach Verhältnisse der Theilnahme an den Vortheilen des gesellschaftlichen Verbandes bestimmt werden." Rotteck, *Lehrbuch der ökonomischen Politik*, vol. iv of his *Lehrbuch des Vernunftrechtes und der Staatswissenschaften*, 1835, p. 287.

insurance.⁵⁹ So Braun terms the proportional income tax the really just insurance premium for person and property;⁶⁰ and Graffenried says that every tax is sheer confiscation unless the owner receives a directly proportional return for it.⁶¹

One of the ablest of the more recent German writers, von Hock, develops a peculiar theory, very like that afterwards elaborated by Dupont and Bathie in France. According to Hock all taxes are rewards paid for state services. The benefits conferred by state action are in part incalculable. Certain general principles, however, may be laid down. In the first place whoever lives in the state enjoys the protection of his person and takes part in the welfare of the commonwealth. These benefits are the same for every one. Secondly, all people who possess or receive anything within the state enjoy the protection which the state affords to their property or income. These benefits are best measured by the extent of the property or income.⁶² Thirdly, every one who calls upon the state for particular services ought to pay for the cost of these services. Hence concludes von Hock, there

⁵⁹ Julius Faucher, *Staats-und Communal-Budgets*, 1863, ii, p. 204.

⁶⁰ "Die Blut-und Einkommensteuer (ist) die Versicherungs-prämie, welche das Volk für die generelle Lebens- und Eigenthumsassecuranz der Staatsgewalt, bei welcher es versichert ist, entrichtet." Braun, *Staats- und Gemeindesteuern*, ii, 1866, p. 9.

⁶¹ "Jeder vom Staate bezogene Einkommenstheil ist seinen Eigenthümern mit Unrecht entzogen, wenn ihm nicht Entsprechendes dafür geleistet wird." v. Graffenried, *Ueber die Einkommensteuer*, 1855, p. 58.

⁶² "Der Werth des staatlichen Schutzes für seinen Besitz oder Erwerb und die Vortheile, welche ein wohl geordneter und verwalteter Staat auf die Steigerung aller Werthe ausübt," is to be measured by the "Nutzen den sie dem Besitzer oder Erwerber gewähren. Dieser Nutzen hängt von dem Werthe der besessenen oder erworbenen Sache und dieser Werth von der Grösse des Einkommens oder des von dem Eigner diesem Einkommen vorgezogenen Genusses ab." v. Hock, *Die öffentlichen Abgaben und Schulden*, 1863, p. 16.

should be three fundamental taxes—a personal tax equal for all, a proportional property or income tax, and a series of special payments for special services. The income tax, however, must be assessed only on the surplus over the minimum of existence. Von Hock maintains that this is not the same thing as taxing only the clear income, for clear income might be so defined as to cause a tax to be simply a premium on extravagance. He desires an exemption of a fixed sum, and proportional taxation on the surplus.⁶³ Von Hock therefore combines the cost-of-service and value-of-service theories, and is more logical than Thiers, in recognizing that they do not lead to the same results.

Other countries may be passed over with a bare mention, as the advocates of the benefit theory here simply follow their French or German prototypes. In Italy, already in the eighteenth century, Compagnoni wrote a special work on progressive taxation, and maintained that the system was essentially unjust because taxation is simply a payment for protection, and because no one could prove that protection increased faster than property.⁶⁴

During the present century a number of writers for a long time took the same ground, the most noted of the recent authors being Boccardo, who simply follows Leroy-Beaulieu. Boccardo, however, displays a remarkable ignorance of recent literature in saying that “scientifically

⁶³ “Wollte man aber stets nur das wirklich freie Einkommen d. i. bloss den Ueberschuss besteuern der nach Befriedigung aller Gelüste und Launen des Eigners als Ersparniss am Schluss des Jahres übrig bleibt, so besteuert man eigentlich nichts als die Sparsamkeit, gewährt der Verschwendung eine Prämie und verliert, da selten ein solches Ersparniss handgreiflich nachgewiesen werden kann, das ganze Steuer-objekt aus den Händen.” *Ibid.*, p. 76.

⁶⁴ G. Compagnoni, *La Tassa progressiva*, 1797, 5, 8. Cf. also Ricca-Salerno, *Storia della Dottrine Finanziarie in Italia*, 1881, p. 171; 2nd ed. (1896), p. 389.

the question is decided, and decided against progression."⁶⁵ In Spain, also, Pastor, the chief of the earlier writers on finance, takes the position that taxes must be proportioned to the benefits that each citizen derives.⁶⁶

⁶⁵ "Scientificamente la questione della base dell' imposta è decisa ed è decisa contra la progressività. Giustizia in materia di tributi non è che sinonimo di proporzionalità, fuori della quale non è che l'arbitrio, vale a dire precisamente l'opposto della giustizia." Boccardo, *Principii della Scienza, e dell' Arte delle Finanze*, 1884, p. xxvii.

⁶⁶ Pastor, *La Ciencia de la Contribucion*, 1856, vol. i, *passim*.

HISTORICAL APPENDIX II.

THE BENEFIT THEORY LEADS TO NON-PROPORTIONAL TAXATION.

In the preceding appendix we have passed in review most of the advocates of the give-and-take theory of taxation, and have learned that they drew from this theory the conclusion of proportional taxation. There are, however, many writers who stoutly uphold the benefit theory, but who, on the contrary, do not confess that they need on that account to defend proportional taxation. The writers in this class may really be divided into several categories. But they may be all classed together, so far as they profess to see the weakness of strictly proportional taxation as an outcome of the benefit theory. Some simply object to proportional taxation without laying down any positive programme; some modify the proportional theory by positing the doctrine of exemption of the minimum of subsistence; some go so far as to demand progressive taxation outright.

One of the most remarkable advocates of the give-and-take theory, who at the same time opposes the proportional tax on property or income, is Gandillot. Although he rejects the proportional property or income tax, however, he equally rejects the progressive tax. Gandillot bases his idea of taxation not on the advantages received by the individual, but on the cost of service to the state. He objects to the theory of advantages, because he claims that it is impossible to measure the advantages to each. He professes to find a safer guide in the cost-of-service theory. Taxes must be the exact return for particular services. These services, however, are proportional neither to property nor to income. They are

not proportional to property in the first place because many public services do not interest all the property owners at all; secondly, because even if they affect all owners they do not affect them in any fixed proportion to their possessions, since pieces of property of the same value may often require unequal expenses for protection.¹ And taxes cannot be proportional to income, for those who purchase some gratification or protection or any object at all must pay for it in proportion to the value of the service, not in proportion to their income.² An innkeeper regulates his charges not in accordance with the personal resources of his guests, but according to the value of the food, lodging and accommodations furnished. The state is like the innkeeper.³ Taxes proportional to property or income are hence unjust. They tend to throw on some the debts of others.⁴

It is true indeed that in Gandillot's opinion progressive taxes are not much better. It is not so much the proportion or progression which is at fault, as the basing of the tax on property, or income, or faculty. The only logical method, concludes Gandillot, is to develop a system of taxation where each element shall exactly represent the

¹ "De toutes les règles en matières fiscales, la plus juste est celle qui exige que l'impôt soit toujours l'exacte rémunération d'un travail ou d'un objet fourni." Gandillot, *Principes de la Science des Finances* (n. d., about 1874), i, p. 218. "L'impôt n'est que le prix de service de protection, de production ou d'amélioration, analogue aux travaux divers dont les frais déterminent la valeur réelle des choses." *Ibid.*, p. 225. "Chaque membre de la nation ne doit payer que ce qu'il reçoit." *Ibid.*, p. 142.

² *Ibid.*, p. 146.

³ "L'impôt, en effet, n'est-il le prix d'un bénéfice obtenu de l'Etat; et ceux qui achètent une jouissance, une protection, un bon office, un objet quelconque, ne doivent-ils point payer cet objet au prorata de leur lots respectifs, sans égard à leurs revenus?" *Ibid.*, p. 171.

⁴ "L'impôt proportionnel aux fortunes, et l'impôt proportionnel aux revenus, tous deux, par une manifeste injustice, tendent également à rejeter sur les uns la dette des autres." *Ibid.*, p. 172.

cost of the particular service to the individual. He does not show us, however, how this is to be done. The point to which we have desired to call attention is the fact that one of the strongest advocates of the give-and-take theory holds that it cannot logically lead to proportional taxation. It is here that we see the difference between Sargant in England and Gandillot in France; and of the two, the latter is the more logical.

A far larger number of writers object to strictly proportional taxation, sometimes without being aware of it, when they demand the exemption of a minimum of subsistence. For if a certain amount of property or of income is entirely exempted the tax is assuredly not proportional on the whole property or income. It may indeed be proportional on the surplus above a certain amount. But it is then virtually degressive taxation on the whole.

The founder of the minimum-of-subsistence theory has usually been said to be Jeremy Bentham, although his words so far as we have noted have never been quoted. Bentham was a great advocate of what he called the do-nothing or be-quiet theory of politics, and held logically to the give-and-take theory of taxation. He maintained, however, that it is wrong, as it is practically impossible to tax persons on what they need for necessities of life. Never tax a person when he has not the wherewithal to pay. "The individual being unable to pay the tax on account of his indigence, finds himself subject to grave evils. Instead of the inconveniences of the tax, the sufferings of privation are experienced; for this reason a capitation tax is bad; because a man has a head, it does not follow that he has anything else." Bentham objects to taxes on the necessities of life, because they may be followed by physical privation, disease, and even death itself; and no one perceive the cause: All these he calls

"misseated" taxes, because they spare the rich to the prejudice of the poor.⁵

Several decades before Bentham, however, the same departure from proportional taxation had been advocated in much more precise language by French, English and German economists. Thus, for instance, Forbonnais took a very strong position. "The object of taxation," says Forbonnais, "is the preservation of property; and property is *nil* if it does not afford subsistence. Hence, the physical subsistence of every family is a privileged part of all income. Only the surplus above this minimum can be assigned to the public for the support of government."⁶

The exemption of the minimum of subsistence, or what they called the "*nécessaire physique*" was also proclaimed by Rousseau and by many of the writers at the time of the French Revolution.⁷ Robespierre was at first a partisan of this doctrine;⁸ but somewhat later he abandoned the idea and came out as the great defender of the principle of universality of taxation, declaring that any favor of this kind was an insult to the people.⁹ He de-

⁵ Bentham, *Principles of the Civil Code*, chap. xv. In *Collected Works*, by Bowring, 1843, i, p. 319.

⁶ "Le service public a pour objet la conservation des propriétés; et la propriété est nulle si elle ne donne la subsistance; d'où il s'ensuit que la subsistance physique de chaque famille est une portion privilégiée sur le revenu avant le service public." . . . "L'excédant de cette subsistance physique est donc la seule portion du revenu sur laquelle le service public puisse être assigné. Ainsi le revenu national, soumis aux combinaisons de finance, n'est que le montant du superflu de chaque citoyen." Forbonnais, *Principes Economiques*, 1758, § 5; in Guillaumin's edition of *Mélanges d'Economie Politique*, i, 1847, p. 204.

⁷ See below.

⁸ Gomel, *Hist. Financière de l'Assemblée Constituante*, i, p. 164.

⁹ He said that he was now "éclairé par le bon sens du peuple qui sent que l'espèce de faveur qu'on lui présente n'est qu'un injure.

manded that such a humiliation be not inflicted on the "partie la plus pure de la nation," and that the rich should not be given a superiority. The result of any exemption from such an honorable obligation to be taxed would necessarily result in the restriction of democracy.¹⁰ It was chiefly owing to his influence that the new constitution contained the following clause: Nul citoyen n'est dispensé¹¹ d'honorable obligation de concourir aux charges publiques.

In England the first important writer to enunciate this principle was Sir James Steuart. "According to equity and justice all impositions whatsoever ought to fall equally and proportionally on every one according to his superfluity." Steuart proceeds to explain that this means the income that remains to him after the necessary expenses of subsistence. "Whatever a people consumes beyond the necessary I consider a superfluity which may be laid under taxation." Steuart continually recurs to the position that "nothing can be the object of taxation except what is over and above the physical necessary of every one." The "physical necessaries" is one of his favorite phrases.¹²

Dean Woodward, in 1768, puts the same idea even

¹⁰ "En effet, si vous décrétiez que la misère excepte de l'honorable obligation de contribuer aux besoins de la patrie, vous décrétiez l'aristocratie des richesses, et bientôt vous verrez ces nouveaux aristocrates, dominant dans les législatures, avoir l'odieux machiavélisme de conclure que ceux qui ne paient point les charges ne doivent point partager les bienfaits du gouvernement. Il s'établirait une classe des prolétaires, une classe d'ilotes, et l'égalité et la liberté périraient pour jamais."

¹¹ Gomel, *Histoire Financière de l'Assemblée Constituante*, i, p. 464; ii, p. 34.

¹² Steuart, *Political Economy*, 1767, book v, chap. xii. In his *Works*, vol. iv, pp. 298, 314, 317, etc.

more strongly. "Before we begin to tax any income for the poor," says he, "we must deduct from it as much as is requisite to purchase for the possessor and his family the absolute necessities of life. No man can be bound to give to another what is essential to his own subsistence. To this every man has that exclusive right on which the very claim of the poor is founded."¹³

In the famous debate which resulted in England's first income tax, Lord Auckland upheld the theory of the exemption of a minimum of subsistence — £60 — and defended the gradual rise of the rate up to £200 for the same reasons. But he objected to progressive taxation beyond this "because of the implied inference, that because a man possesses much, therefore more shall be taken from him than is proportionably taken from others."¹⁴ Some of the earlier German writers took the same ground. Thus Sonnenfels in his widely read work in public finance based his theory of proportion on the fact that governmental protection was proportional to property. He demanded, however, the exemption of the minimum of subsistence, which he calls "the sacred portion of mankind."¹⁵ Sonnenfels even goes farther and suggests the exemption in each case of a variable sum according to the standard of life; for he sees that there is no absolutely fixed minimum of subsistence. This system he calls the

¹³ Richard Woodward, *An Argument in Support of the Right of the Poor in the Kingdom of Ireland to a National Provision*. Dublin, 1768, p. 50.

¹⁴ *The Substance of a Speech made by Lord Auckland in the House of Peers on the Bill for granting certain Duties upon Income*, 1799, p. 25. That Lord Auckland was a believer in the give-and-take theory clearly appears from his discussion of the income tax as "a fair price for (its) protection." *Ibid.*, p. 27.

¹⁵ "Dieser geheiligte Antheil der Menschheit." Sonnenfels, *Grundsätze der Polizei, Handlung und Finanz*, 1765, iii, § 94. See especially 5th ed. (1787), pp. 192-194.

taxation of free income, based on the standard of comfort.¹⁶

Bentham is thus not the founder of the theory of the exemption of the minimum of subsistence.¹⁷ The chief advocates, however, of the degressive theory (in the sense of proportional taxation above a certain exempted minimum) as an outcome of the give-and-take theory are to be found among the German writers of the first half of this century. They elaborated what is known as the clear income theory of taxation (*Freieinkommens-theorie*) which, as we have seen,¹⁸ rests practically on the Ricardian view of income.

Among the earliest advocates of the clear-income theory resting on the benefit principle was Behr. Behr thinks it "undeniable that the real basis as well as the measure of the duty to pay taxes is to be found in the participation in the protection, and in the enjoyment of the insurance institutions of the State," and that any tax the extent of which is not regulated by this condition sins against the cardinal doctrine of justice.¹⁹ He deduces from this the necessity of a tax proportional to what he calls "clear produce of property."²⁰

¹⁶ "Besteuerung des reinen Einkommens" and "standesmässiger Unterhalt" are his words. *Ibid.*, § 102, iii, p. 214-216.

¹⁷ This error, so often repeated, is probably due to John Stuart Mill, who refers only to Bentham in connection with the doctrine. Even recent writers like Cohn, *Finanzwissenschaft*, 1889, § 221, repeat the mistake.

¹⁸ Above, p. 151.

¹⁹ "Es ist nicht zu läugnen dass dieser wahre Grund der Steuerpflicht bestehe in der Theilnahme am Schutz, im Genusse der Garantie-Anstalten des Staats; dass das Mass der Steuerpflicht eines Jeden coincidiren müsse mit dem Umfange jener seiner Theilnahme, dieses seines Genusses," etc. Behr, *Die Lehre von der Wirthschaft des Staats, oder pragmatische Theorie der Finanzgesetzgebung*, 1822, pp. 92-93.

²⁰ "Der reine Vermögens-Ertrag ist der eigentliche Messer der

The clear-produce idea was soon more sharply formulated. Thus Jakob holds that it is just that everyone should pay the state for the advantages that he receives or for the expenses that he occasions, and that this denotes taxation proportional to clear income. By clear income, however, he means the exemption of necessary expenses.²¹ On the other hand Lotz is not quite clear about the principle. The first rule, which he says is the legal principle, is to apportion taxes according to the extent of participation in the benefits of the civil life. This is often modified, however, by the second rule, or the economic principle, that men should be taxed according to their income.²² Lotz thus differs from the others in seeming to set the income principle over against the benefit principle. He proceeds, however, to define the taxable income as the surplus product above expenses, calculated according to the individual circumstances, and he objects to those who desire to take the total income as the standard.²³ Simil-

Theilnahme am Schutz und an den Garantie-Anstalten des Staats, indem sich in ihnen nur die Realität und das Product dieser Theilnahme ausspricht." Behr, *op. cit.*, p. 96.

²¹ "Es ist der Gerechtigkeit gemäss dass derjenige die Kosten einer Thätigkeit oder Anstalt trage, der davon zu seinem Vortheile Gebrauch macht, oder durch sein Verhalten zu ihrer Ausübung oder Errichtung Veranlassung giebt." He concludes that taxation must be "nach dem Masstabe des reinen Einkommens." Jakob, *Die Staatsfinanzwissenschaft*, 1821, pp. 171, 202, 1014; pp. 112, 123 and 608 of second ed. (1837).

²² "Nach den Gesetzen des Rechts möchte es das Kürzeste sein den öffentlichen Bedarf auf jeden einzelnen Abgabepflichtigen nach den Verhältnissen zu vertheilen, in welchen er an den Vortheilen des bürgerlichen Lebens Antheil nimmit." J. F. E. Lotz. *Handbuch des Staatswirthschaftslehre*, 1822, § 131. See also 2d ed. (1837), iii, p. 179.

²³ "Der einzige, wahre, richtige und brauchbare Massstab . . . ist . . . das reine Einkommen, dass jeder Abgabepflichtige aus seiner Betriebsamkeit als Ueberschuss des dabei gehabtten Güteraufwands nach seinen individuellen Verhältnissen zieht, oder mit

arly, a few years later, Fulda demands proportional taxation of clear income, which he defines as the "surplus over the family expenses necessary to subsistence, and over what is needful to maintain one's capital at the original figure."²⁴ Malchus, who at times seems to hesitate somewhat when considering the bases of taxation, finally concludes that equality and universality of taxation depend on the fact that every one gets an equal protection from the State.²⁵ Therefore, he thinks, every one should be taxed in proportion to his clear income.²⁶ Murhard, who gives a good review of the opinions of his predecessors, and who in some places also seem to vacillate between the two theories,²⁷ finally emerges as a decided opponent of progressive taxation, on the express ground of McCulloch that the only just theory is the leave-them-as-you-find-them theory, which to him means proportional taxation.²⁸ He however, qualifies this later, by showing that taxes must be proportional only to clear income, according to the

anderen Worten sein individuelles reines Einkommen." *Ibid.*, iii, p. 187.

²⁴ "Der Ueberschuss über die Bedürfnisse seiner eigenen und seiner Familie absolut nothwendigen Unterhaltes und über die nothwendigen Erfordnisse, die die jährliche Unterhaltung seines bereits erworbenen stehenden und umlaufenden Kapitals fordert." Fulda, *Handbuch der Finanzwissenschaft*, 1827, § 140, p. 151.

²⁵ They depend "auf den gleichen Schutz für Erstrebung seiner individuellen Zwecke, und auf den gleichen Antheil an dem Genuss der Staatsanstalten." Malchus, *Handbuch der Finanzwissenschaft*, 1830, i, p. 152.

²⁶ "Die Grösse des Beitrags muss mit der Grösse dieses disponiblen reinen Einkommens möglichst proportionirt werden." *Ibid.*, i, p. 158.

²⁷ Murhard, *Theorie und Politik der Besteuerung*, 1834, pp. 24, 80.

²⁸ Murhard quotes the *Edinburgh Review* article of 1833 (without knowing that it was written by McCulloch), and makes that the basis of his argument. *Ibid.*, pp. 540-553. Meyer, *Principien der gerechten Besteuerung*, 1884, p. 41, is therefore wrong in asserting that Murhard is the originator of this doctrine. Cf. above p. 728.

views of Behr and his successors.²⁹ Finally one of the latest writers to accept this theory was Biersack. Biersack indeed thinks that the ideal standard of taxation is the relative measure of advantages that accrue to the individual.³⁰ This he finds in the proportional clear income. Unlike some of his predecessors, however, he restricts the "necessary" income to what is absolutely requisite for the individual, not for his family or dependents.³¹

Other more recent writers, who know nothing of the clear-income theory, advocate degressive taxation, not on theoretical grounds, but primarily for practical reasons. Among modern French writers on public finance Chailley is one of the most noted. He is to be distinguished from most of his countrymen in that he advocates an income tax, as a compensatory tax, "impôt de redressement." Like most of the French writers, however, he still follows the give-and-take theory of taxation.³² Curiously enough, he favors what is known as the "discriminating" theory in the income tax, *i. e.*, a differentiation in the rate according to the source of income. But he opposes progressive taxation for the same reason as Leroy-Beaulieu. Yet again illogically, he advocates the exemption of the minimum of subsistence, "because the poor cannot pay it."³³ Accordingly, he hereby declares himself a partisan of the degressive principle.³⁴

Some of these writers are frank enough to confess that they are not logical. Thus the Italian publicist Benvenuti,

²⁹ Murhard, *op. cit.*, pp. 447-463.

³⁰ "Das Verhältniss in welchem die Einzelnen an den vom Staate gewährten Vortheilen participiren." Biersack, *Ueber Besteuerung*, 1856.

³¹ *Ibid.*, p. 40.

³² Chailley, *L'Impôt sur le Revenu*, 1884, p. 408.

³³ "Il s'agit seulement de ne pas exiger d'un revenu minime ce qu'il ne peut pas payer." *Ibid.*, p. 420.

³⁴ "Ce serait l'impôt dégressif." Chailley, *op. cit.*, p. 423.

who also clings to the give-and-take theory and objects to progressive taxation, concedes that the advocates of the exemption of the minimum of subsistence are not logical.⁸⁵ He claims, however, that "logic must be tempered with equity"—and hence concludes that the exemption is an "incontestable necessity." We might feel tempted to retort with his own answer to Pescatore: "How can one deny that what is necessary is just?"⁸⁶ It is a poor argument which defends degressive taxation, even though illogical, because it is just; and which opposes progressive taxation on the ground that it is unjust, although the same reasons of justice lie avowedly at the basis of each. When we abandon logic, controversy is at an end.

The gradual development of theory from degressive to progressive taxation is seen in Sismondi. Sismondi clings firmly to the give-and-take theory, and maintains that on this account the minimum of subsistence must be exempted. "Taxation being the price paid by the citizen for his enjoyments, we must never demand a tax when there are no enjoyments."⁸⁷ In an eloquent plea he points out the grave danger of infringing on this minimum⁸⁸—an argument which clearly holds good only on

⁸⁵ "Si, è vero, i fautori dell' imposta proporzionale, ammettendo il minimum, non sono coerenti al loro principio. Un professore di logica dovrebbe sgridarneli." Benvenuti, *Le Imposte, Teoria e Pratica*, 1869, p. 90.

⁸⁶ "Poichè come negare che sia giusto ciò che é necessario." *Ibid.*, 77.

⁸⁷ "L'impôt étant le prix que le citoyen paie pour ses jouissances, on ne saurait le demander à celui qui ne jouit de rien; il ne doit donc jamais atteindre la partie du revenu qui est nécessaire à la vie du contribuable." Simonde de Sismondi, *Nouveaux Principes d'Économie Politique*, 1819, book vi, chap. ii. The quotation is from the 2nd ed. (1817), vol. ii, p. 170.

⁸⁸ "Il y a dans le salaire une partie nécessaire qui doit conserver la vie, la force et la santé de ceux qui le perçoivent, afin que la

the assumption that the tax is not shifted. Sismondi, however, goes further. Inasmuch as most of the public expenses are destined to protect the rich against the poor, it is just "that the rich contribute not only in proportion to their wealth, but something in addition, in order to maintain this order which is so advantageous to them."³⁹ Sismondi shows how this may be done, and although he thinks that we may admit the principle of proportion "with these slight modifications,"⁴⁰ it is apparent that the "slight modifications" in reality constitute a system of progressive taxation. Sismondi, thus almost against his will, abandons the theory of proportional taxation.

Finally, there is a class of writers who deduce from the give-and-take principle the doctrine of progressive taxation in its entirety. The earliest and most important advocate of this theory is the celebrated Jean Jacques Rousseau. Rousseau, it is true, advanced as one of the arguments in favor of progression the point made by Montesquieu as to the sacrifice incurred by the curtailment of necessities.⁴¹ His chief defense, however, rests on the consideration that under existing conditions the wealthy

travail se continue, afin que la salaire qui pour eux est un revenu, mais qui est un capital pour ceux qui payent, puisse rendre à ces derniers les fruits qu'ils en attendent, et continuer, d'année en année, à imprimer le mouvement à la machine sociale. Malheur au gouvernement qui touche à cette partie; il sacrifie, tout ensemble, et des victimes humaines et l'espérance de ses future richesses." Sismondi, *op. cit.* p. 168.

"La plus grande partie des frais de l'établissement social est destinée à défendre le riche contre le pauvre; parceque, si on les laissait à leurs forces respectives, le premier ne tarderait pas à être dépouillé. Il est donc juste que le riche contribue, non seulement en proportion de sa fortune, mais par delà même cette proportion, à soutenir un ordre qui lui est aussi avantageux." *Ibid.*, p. 155.

"Avec ces légères modifications, on peut donc admettre la règle générale que chacun doit contribuer au maintien de la société en proportion de son revenu." *Ibid.*, p. 157.

⁴¹ See below, historical appendix five.

secure more benefits from government than do the poor. He gives a most vivid picture of the situation at that time in France, showing the wretched condition of the lower classes.⁴²

⁴² "Un troisième rapport, qu'on ne compte jamais, et qu'on devrait toujours compter le premier, est celui des utilités que chacun retire de la confédération sociale, qui protège fortement les immenses possessions du riche, et laisse à peine un misérable jouir de la chaumière qu'il a construite de ses mains. Tous les avantages de la société ne sont-ils pas pour les puissans et les riches? Tous les emplois lucratifs ne sont-ils pas remplis par eux seuls? Toutes les grâces, toutes les exemptions ne leur sont-elles pas réservées? Et d'autorité publique n'est elle pas toute en leur faveur? Qu'un homme de considération vole ses créanciers, ou fasse d'autres friponneries, n'est-il pas toujours sûr de impunité? Les coups de baton qu'il distribue, les violences qu'il commet, les meurtres mêmes et les assassinats dont il se rend coupable, ne sont-ce pas des affaires qu'on assoupit, et dont au bout de six mois il n'est plus question? Que ce même homme soit volé, toute la police est aussitôt en mouvement et malheur aux innocens qu'il soupçonne. Passe-t-il dans un lieu dangereux? Voilà les escortes en campagne; l'essieu de sa chaise vient-il à se rompre? Tout vole à son secours; fait-on du bruit à sa porte? Il dit un mot, et tout se tait: la foule l'incommode-t-elle? Il fait un signe, et tout se range: un charretier se trouve-t-il sur son passage? Ses gens sont prêts à l'assommer; et cinquante honnêtes piétons allant à leurs affaires seraient plutôt écrasés, qu'un faquin oisif retardé dans son équipage. Tous ses égards ne lui coûtent pas un sou; ils sent le droit de l'homme riche, et non le prix de la richesse. Que le tableau du pauvre est différent; plus l'humanité lui doit, plus la société lui refuse; toutes les portes lui sont fermées même quand il a le droit de les faire ouvrir; et si quelquefois il obtient justice, c'est avec plus de peine qu'un autre n'obtiendrait grâce: s'il y a des corvées à faire, une milice à tirer c'est à lui qu'on donne la préférence; il porte toujours, outre sa charge, celle dont son voisin plus riche a le crédit de ce faire exempter—à moindre accident qui lui arrive, chacun s'éloigne de lui, si sa pauvre charrette renverse, loin d'être aidé par personne, je le tiens heureux s'il évite en passant les avanies des gens lestes d'un jeune Duc; en un mot, toute assistance gratuite le fuit au besoin, précisément parce qu'il n'a pas de quoi la payer, mais je le tiens pour un homme perdu, s'il a le malheur d'avoir l'âme honnête, une fille aimable, et un puissant voisin." Rousseau, *Discours sur l'Oeconomie Politique*, Geneva, 1758, pp. 61-62.

After calling attention to several minor points Rousseau sums up the relation between the poor and the rich in the following words:⁴³ "You need me for I am rich and you are poor: let us make a compact. I'll permit you to have the honor of serving me on condition that you give me the little that you have left in return for the trouble I am taking in ordering you about." The conclusion from all this is, in Rousseau's opinion, the progressive rate, for taxation ought to be imposed not only in proportion to the wealth of the taxpayer but in a ratio based on a consideration of their relative superfluities.⁴⁴ And he adds, rather maliciously: "Opération très important et très difficile que font tous les jours des multitudes de commis honnêtes gens et qui savent l'arithmétique, mais dont les Platon et les Montesquieu n'eussent ôsé se charger qu'en tremblant et en demandant au ciel des lumières et de l'intégrité."⁴⁵

The most exhaustive defense of progressive taxation in the 18th century, however, is made by Graslin in an anonymous work designed to review the doctrines of the Physiocrats, or, as they were then called, the Economists.⁴⁶ Graslin starts out from the benefit theory of taxation. Every one, he tells us, needs to be protected,

⁴³ "Resumons en quatre mots le fait social des deux états. Vous avez besoin de moi, car je suis riche, et vous êtes pauvre: faisons donc un accord entre nous: je permettrai que vous ayez l'honneur de me servir, à condition que vous me donnerez le peu qui vous reste pour la peine que je prendrai de vous commander."

⁴⁴ "Si l'on combine avec soin toutes ces choses, on trouvera que, pour repartir les taxes d'une manière équitable et vraiment proportionnelle, l'imposition n'en doit pas être faite seulement en raison des biens des contribuables, mais en raison composé de la différence de leur conditions et du superflu de leurs biens."

⁴⁵ *Ibid.*, p. 63.

⁴⁶ *Essai analytique sur la Richesse et sur l'Impôt, ou l'on refute la nouvelle Doctrine Économique, qui a fourni à la Société Royale d'Agriculture de Limoges les principes d'un programme qu'elle a publié sur l'Effet des Impôts indirects. 1767.* An elaborate expo-

and this need of protection is among our chief wants. It therefore constitutes an element of wealth like other forms of wealth; and as a consequence a tax represents an exchange of the wealth of production in return for other wealth in proportion to the relative values of each. This, he says, is the primitive law of taxation.⁴⁷ Civilization, however, upsets this primitive arrangement and brings about a state of affairs which completely inverts the natural order. For now some contribute to the mass of wealth more than they get out of it, and *vice-versâ*. Consequently, since those who get out of it more than they put in ought to pay for the wealth common to all, it follows that they ought to be taxed accordingly.⁴⁸ This, however, he tells us, leads by a somewhat different train of reasoning to the progressive principle.⁴⁹ It is precisely here, however, that Graslin leaves the basis of the benefit theory and adopts that of the faculty theory. He may, therefore, more properly be considered under that head a little later.⁵⁰

sition of his general doctrine will be found in J. Desmars, *Un Précurseur d'Adam Smith en France*. J. J. L. Graslin, 1900.

"Le besoin de la protection qui tient un des premiers rangs dans l'ordre des besoins pour les hommes en société, donne un véritable valeur de richesse à la puissance protectrice, qui, sous cette considération, est une partie de la richesse de la nation. . . . L'impôt consiste donc dans l'échange de la richesse de protection contre les autres richesses, en raison des valeurs relatives de chacune. C'est la loi de la nature même; c'est la règle primitive de l'impôt." *Op. cit.*, pp. 324, 328-9.

"L'ordre même de la nature étant interverti par l'ordre social, dans lequel les uns mettent à la masse de la richesse beaucoup plus qu'ils n'en retirent; ceux, qui retirent de la masse plus qu'ils n'y mettent, doivent être chargés de l'achat de cette richesse commune à toute la société; et cela en raison de l'avantage qui en revient à chacun d'eux." *Ibid.*, p. 329.

"Ce que nous ramène par des considérations différentes à la loi de la contribution dans une raison toujours progressive des facultés de chaque contribuable." *Ibid.*, p. 330.

⁵⁰ See below, historical appendix five.

Another and perhaps better known advocate of this tendency is the celebrated Condorcet. Condorcet starts out by maintaining the necessity of exempting the minimum of subsistence. A proportional tax on the income exceeding a given sum, he tells us, is a progressive tax on the whole income; and this is in complete accord with the principles of the most rigorous justice.⁵¹ (In reality it is degressive taxation on the whole income. Scientific terminology, however, it must be remembered, was not yet well developed in his day). We must go further, however, says Condorcet. There are some public expenses which have a special value to the rich, without losing their value common to all. In fact, we can never really encourage the useful arts without producing a perfection which will be of especial benefit to the wealthy. Hence the rich ought to pay an additional sum because of certain exclusive benefits that accrue to them from governmental activity. This is the second sense in which progressive taxation is just.⁵² Condorcet

⁵¹ "La partie de ce revenu, nécessaire à la subsistance de la famille, ne peut être imposée . . . C'est donc sur l'excédant seul que l'impôt doit être placé. . . . Voilà donc un impôt proportionnel sur la portion du revenu excédant 400 livres, mais progressif sur le revenu entier et cette distribution est absolument conforme aux principes de la plus rigoureuse justice." Condorcet, *Sur l'Impôt Progressif*, 1792, in Guillaumin's edition of *Mélanges d'Economie Politique*, i (1847), p. 567.

⁵² "Or il existe des dépenses dont l'utilité n'est au dessus des privations occasionées par l'impôt que pour ceux auxquels il n'ôte qu'un véritable superflu. . . . Ensuite la même dépense ne peut-elle avoir pour le riche une utilité dont il profite seul, sans qu'il ne perde rien de l'utilité commune à tous? . . . Il serait donc très juste de dire: tous les revenus sont proportionnellement imposés; mais, au-dessus d'un certain terme, l'excédant paiera proportionnellement une autre contribution. . . . Celle-ci sera destinée à faire payer par les riches certains avantages exclusifs qu'ils retirent de dépenses, faites à la vérité pour l'utilité générale, mais dont il résulte nécessairement des jouissances qui ne peuvent être que pour

goes on to point out some limitations on the rate of graduation. In principle, however, he favors progression because of his belief in the greater benefits to the wealthy.

Similar ideas were common at the time of the French Revolution. Thus, the pamphleteers, Noilliac and Delaunay, as well as Roland, the future minister, upheld progressive taxation on the ground that the rich derived more benefit from the government than the poor.⁵³

In the same way Vernier, one of the prominent members of the Convention, published early in 1793 a monograph in which he defended the progressive principle, since the rich man has far more interest in the maintenance of the social order than the poor man, and since he derives more advantages from it, the tax, he thinks, ought to be "tellement combinée qu'elle soit en raison composée des avantages qu'on retire de la société."⁵⁴ Vernier, however, adds to this defense, in which he quotes from Rousseau, two other arguments which show that he was an eclectic. Thus he accepts the socialistic theory when he says that one of the objects of the progressive tax is to "détruire ces inégalités, ces loupes monstrueuses du corps politique qui dévore tout ce qui les environne;" and finally he follows Montesquieu⁵⁵ in claiming that "il en coûte moins aux riches de prendre sur leur superflu qu'aux pauvres de prendre sur leurs besoins."⁵⁶

A little later in the year Robespierre espoused the eux seuls. Voila encore un second sens dans lequel l'impôt progressif est conforme à la justice." Condorcet, *op. cit.*, pp. 568-569.

⁵³ Noilliac, *Le plus fort des Pamphlets. L'Ordre des Paysans aux États Généraux*, 1789, p. 21; Delaunay, *Bases Générales d'un Système d'Imposition*, 1793, pp. 11-12; Roland, in *Le Financier Patriote*. Cf. Lichtenberger, *Le Socialisme au XVIIIe Siècle*, 1895, pp. 401, 429, 438 et *passim*.

⁵⁴ Vernier, *L'Impôt sur le Luxe et les Richesses*.

⁵⁵ See below, historical appendix five.

⁵⁶ For his practical proposition, see above, pp. 33-34.

same idea, and posited the question as to whether anything could be more clearly inherent in the nature of things or based more firmly in eternal justice than the obligation to contribute progressively in accordance with benefits received.⁵⁷ He desired the principle to be consecrated in the new constitution in the following article: "Les citoyens dont les revenus n'excèdent point ce qui est nécessaire à leur subsistance doivent être dispensés de contribuer aux dépenses publiques, les autres doivent les supporter progressivement selon l'étendue de leur fortune."⁵⁸ Later on, however, Robespierre changed his mind as to the exemption of the minimum of subsistence.⁵⁹

The chief modern advocate of progressive taxation as the outcome of the give-and-take theory is Joseph Garnier. Garnier makes a distinction between the progressive tax and what he calls the progressional tax. In the former case the progression is rapid and unlimited, and the tax is therefore absurd, because it is simply a means of spoliation. In the latter case, that of the "rational and serious progressive tax," the progression increases very slowly and stops at a moderate maximum, so that it can never exceed a definite and limited portion of the income. This is what he calls the progressional tax, or the rational progressive tax. While he hotly opposes the first species, Garnier strongly upholds the second, and objects to most of the French writers for confounding the two. In reality, however, notwithstanding Garnier's explanations,

⁵⁷ "En matière de contributions publiques, est-il un principe plus évidemment puisé dans la nature des choses, et dans l'éternelle justice, que celui qui impose aux citoyens l'obligation de contribuer aux dépenses publiques progressivement selon les avantages qu'ils retirent de la société."

⁵⁸ Gomel, *Histoire de la Législative et de la Convention*, 1902, i, p. 464.

⁵⁹ See above, p. 184. Cf. also Robespierre's monograph entitled, *Sur l'impôt Personnel*, 1790.

there is no substantial difference in principle. They are both progressive taxes.

The real basis of Garnier's defense of the progressive tax, in the sense of a moderate progression, is that the protection afforded by the state increases faster than the increase of property. This he regards as a self-evident fact, and is content with simply positing it as an axiom. Since protection increases more than proportionally to property, taxation must increase progressively. That, he tells us, is the really legitimate, really rational, ideal tax.⁶⁰ It is true, indeed, that Garnier later refers to the possibility of basing the principle of progression on some other reason, when he asks, "In case of public expenses for other purposes than for security, is it not legitimate for the rich to pay more than the poor?"⁶¹ He does not attempt to develop this idea, however, so that Garnier's

⁶⁰"L'impôt idéal vraiment légitime, vraiment rationnel est celui qui équivaut exactement aux avantages que le contribuable retire de la société et surtout à la valeur de la sécurité qui lui est garantie. Or la question est de savoir si ceux qui ont de forts revenus et une belle situation dans la société ne sont pas protégés plus que proportionnellement à leur fortune. Si l'on trouvait que les citoyens plus aisés sont protégés progressivement, c'est à dire que la protection qu'ils reçoivent est plus que proportionnelle à leur avoir physique et morale, ils devraient contribuer plus que proportionnellement; alors la légitimité de l'impôt progressif ne saurait être combattue, et la difficulté ne serait plus que dans les moyens d'application. Dans ce cas, toutes les réformes financières devraient tendre à établir une proportion progressive, si je puis dire, plus juste et plus équitable que l'égalité de l'impôt qui n'est la plupart du temps qu'une monstrueuse inégalité; encore plus juste et plus équitable que la simple proportion (souvent improportionnelle en fait)." Jos. Garnier, *Traité des Finances*, 4th ed. (1883), p. 69. Cf. first edition (1858), p. 25. The idea is found already in his *Eléments d'Économie Politique*, 1st ed. (1846).

⁶¹"Quand il s'agit de dépenses publiques autres que celles de la sécurité, quand il s'agit de dépenses de luxe, d'agrément, etc., ne semble-t-il pas légitime que le riche et l'aisé payent plus largement que le pauvre, que le citadin paye plus que le campagnard." *Ibid.*

contention may be said to rest on the principle of protection.

In Germany several writers have maintained that the give-and-take theory leads to progressive taxation, which they uphold on that account. In one of his earlier works Eisenhart asserts that "the benefits which individuals do or can derive from governmental institutions increase in geometrical progression."⁶² So Judeich thinks that the state offers a great many advantages which may theoretically be enjoyed by all, but most of which are practically enjoyed only by the wealthier classes. Hence to tax every one in a strict proportion would be unjust.⁶³

One of the most interesting discussions of progression is that of the French engineer, Vauthier, who was inspired by the Revolution of 1848.⁶⁴ Vauthier takes it for granted that taxation must be regarded as an insurance-premium, but he denies that the insurance-premium idea leads necessarily to proportional taxation. He points out that it is really not the pieces of property, but the individuals, that insure themselves, and that as soon as we grant this we abandon the right to absolute private property and supplant it by the idea of property as a social

⁶² "Denn der Vortheil, welchen ein Jeder von den öffentlichen Anstalten hat oder haben kann nimmt nicht blos einfach mit seinem Einkommen zu, sondern steigt in zusammengesetzten Sätzen in geometrischer Progression." Eisenhart, *Philosophie des Staates*, ii (1844), p. 197. Later on, it is true, in his special work on taxation he formally abandons the give-and-take theory completely. Eisenhart, *Kunst der Besteuerung* (1868), pp. 5-9.

⁶³ "Der Staat bietet eine Menge Vortheile, welche zwar von allen Unterthanen benutzt werden dürfen, die aber nur von den Wohlhabenden benutzt werden können. Es wäre ungerecht, den weniger Bemittelten im gleichem Verhältnisse zu besteuern, da er nicht im Stande ist, im gleichen Verhältnisse die Einrichtungen des Staates zu gebrauchen." Judeich, *Die Rentensteuer im Königreiche Sachsen dargestellt* (1857), pp. 111-112.

⁶⁴ L. L. Vauthier, *De l'Impôt Progressif. Etudes sur l'Application de ce Mode de Prélèvement à un Impôt quelconque*, 1851.

institution. If, however, property is a social category, society has a perfect right to modify the form and content of private property, and is hence justified in making taxation progressive if it thinks that the results would be socially advantageous.⁶⁵ Vauthier's defense of the progressive principle is really negative rather than positive. He is concerned chiefly with reviewing the arguments generally advanced in opposition. The chief objection of the day was that the problem of assuring the regularity and continuity of the progressive scale was mathematically insoluble. This objection he seeks to meet by a series of carefully framed formulae, constructed according to a progressively diminishing rate of geometrical increase until the increase itself stops when the rate of the tax reaches fifty per cent of the income.⁶⁶ He attempts, furthermore, to show how the scale is applicable to other imposts in addition to the income tax.⁶⁷

Finally, while Vauthier declares that he is far from exaggerating the importance of the progressive principle, and while he is willing to concede that an erroneous appli-

⁶⁵ "Mais l'impôt, dit-on, est le prix de la protection donnée à la propriété, c'est l'assurance que chacun consent à payer pour jouir en paix du fruit de son travail. De là découle, inévitablement, l'idée de la proportionnalité. J'admets cette convention tacite, cette sorte d'assurance mutuelle des individus pour la protection de leurs propriétés. . . . Mais . . . ce sont en définitive les individus qui s'associent à propos de la propriété, et la nécessité de cette convention, à laquelle nul ne peut se soustraire, fait perdre à la propriété son caractère de droit individuel, pour lui imprimer profondément le cachet d'institution sociale. La société a donc le droit de modifier la forme de la propriété et de régler la question de l'impôt comme toutes autres, au mieux de l'intérêt de ses membres et suivant ce qui lui paraît, à une moment déterminé, la conséquence la plus logique et la plus avancée possible de la loi de justice. Elle peut donc adopter à sa volonté l'impôt progressif au lieu de l'impôt proportionnel." Vauthier, *op. cit.*, pp. 10-11.

⁶⁶ *Ibid.*, chap. iv, pp. 32-50.

⁶⁷ *Ibid.*, chap. 5-7, pp. 50 and 76.

cation of the principle might lead to very serious evils,⁶⁸ he concludes that the difficulties of application are in reality very slight; that the fears of arbitrariness in the system and of fraud in the returns are illusory; that the social influence of a progressive tax, far from being spoliatory in character, would favor agricultural improvements; and that the fiscal returns would be at least as great as in the case of a proportional tax, with the added advantage of exempting the lower incomes.

The most remarkable attempt to prove that the give-and-take principle leads logically to progressive taxation was made by the French engineer Fauveau, in another work where the mathematical method is applied to taxation. Fauveau discusses four possible bases of taxation, namely that taxes should be based on the hypotheses: (1) that every one owes to society what he gains from the social protection; (2) that every one owes to society what it cost society to protect him; (3) that every one ought to receive from the social protection an equal moral advantage; (4) that society ought to impose on every one an equal moral sacrifice.⁶⁹ Here we are concerned with the first two hypotheses only. The others we shall take up later.⁷⁰

Fauveau objects to the assertions of Thiers and Molinari that the insurance theory leads to proportion. Insurance companies, says he, fix the premiums not alone in proportion to the amount of property insured but according to the risks; so that the same amount of property may often pay different rates of insurance. Now

⁶⁸ "Dans l'état actuel de notre constitution économique nous pensons qu'une application mal faite donnerait lieu, sans grands avantages, à des perturbations énormes et soulèverait une repulsion des plus vives." *Op. cit.*, p. 12.

⁶⁹ G. Fauveau, *Considérations Mathématiques sur la Théorie de l'Impôt* (1864), p. 12.

⁷⁰ Below, historical appendix five.

100,000 francs of property which belong to one man would (if there were no social protection) stand a much greater chance of being pillaged than the same amount belonging to several individuals. The premium of insurance would have to be made up of all the infinitely small premiums for insuring each particular element of the large property; for one runs the risk of losing not only the whole of the property but all the amounts inferior to the whole.⁷¹ After a lengthy computation, bristling with mathematical formulas, Fauveau concludes that taxation regarded as an insurance premium must increase more rapidly than the value of the property insured, but less rapidly than the square of the value.⁷² In other words, the insurance theory of taxation leads to progression.

On the other hand, if we desire to proportion taxation to the cost of benefits received, Fauveau thinks it impossible to settle on any definite rate. The cost of punishing attacks made on security of property grows less rapidly than the value of the property; but the cost of preventing possible attacks is progressive, just as are the insurance premiums. He maintains, however, that in this case it is impracticable to frame any mathematical proportion.⁷³ These arguments, as we have already seen, are not very convincing.⁷⁴ It is interesting, however, to

⁷¹ "C'est que chaque individu doit, pour être assuré de la possession de son bien, une somme qui se compose de toutes les primes infiniment petites dues pour se faire assurer chacun des éléments de ce bien, car on court risque d'être volé non seulement de la totalité de son bien, mais de toutes les sommes inférieures à cette totalité." Fauveau, *op. cit.*, p. 24.

⁷² "L'analyse mathématique prouve que l'impôt doit croître plus rapidement que la valeur des biens assurés, mais moins rapidement que le carré de la valeur de ces biens." *Ibid.*, p. 26.

⁷³ *Ibid.*, § 32.

⁷⁴ See above, pp. 154-156.

note how the defenders of the benefit theory advance, by a gradual evolution, to a point where they virtually advocate progressive taxation.

Let us now leave this whole school and investigate the arguments of those who propound, on the contrary, what is known as the faculty theory of taxation.

CHAPTER III.

THE FACULTY THEORY.

The faculty theory of taxation is very old. That a man should contribute to the public burdens in proportion to his ability or faculty is a principle which dates back to the middle ages, both in theoretical literature and in practical legislation, and which may even be found in its main outlines in the writings of the Greek philosophers. The word "faculty" is the usual one in Latin and French tax laws and is the general term employed in all the early American laws, so that "faculty" seems to be a peculiarly appropriate term to use in American discussions. For a long time, however, the best practical test of faculty was supposed to be general property. Thus all through the middle ages when local taxes were levied at all, they were assessed on general property on the principle *juxta bonorum facultatem* or *pro bonorum facultate*.¹

In England the most familiar instance of the use of the word ability is that of the Elizabethan poor law, which provides for the taxation of every inhabitant of the parish "according to the ability of the parish"—a term interpreted to mean property.² It had been so common to identify faculty with property that when the words abi-

¹ Cf. the chapter on "The General Property Tax," in Seligman, *Essays in Taxation*.

² Stat. 43 Eliz., chap. 2, sec. 1. For the gradual change in the interpretation of the word see the volume entitled, *The Local Taxes of the United Kingdom, published under the direction of the Poor Law Commissioners*, 1846, p. 8 *et seq.* For earlier examples of the use of the term "ability" see E. Cannan, *The History of Local Rates in England*, 1896, ch. I.

lity or faculty were first used in American colonial legislation they were held to be tantamount to property.³

Later on, the interpretation of "faculty" was somewhat altered. From meaning property, it now began to denote revenue or income. It was, however, still interpreted to imply a proportional tax,—proportional now no longer to property but to income. We see this idea carried out in legislation. Thus, not to speak of the mediæval town taxes in Europe, we find in the revenue laws of the American colonies toward the middle of the eighteenth century the word "faculty" used to designate the "returns and gains" as over against the "visible estates" or property; and the tax was expressly called the "faculty tax" or the "assessment on the faculty."⁴ Similarly during the French Revolution the principle was repeatedly laid down that taxation should be according to faculty, or according to estates and faculties,—faculty being presumed to stand for revenue as over against property.⁵

³ See the above-mentioned chapter on "The General Property Tax." The American writer Gale holds that the rule of taxing people according to their respective abilities means that the taxes must be assessed according to their respective "estates or visible abilities." Cf. the anonymous work (by S. Gale), *An Essay on the Nature and Principles of Public Credit*, 1784, p. 171.

⁴ See the laws of Massachusetts Bay (1646), Plymouth (1643), Connecticut (1650), New Haven (1649), and Rhode Island in the chapter on "The General Property Tax." in Seligman, *op. cit.*

⁵ "La contribution commune doit être également répartie entre tous les citoyens en raison de leur facultés." "Déclaration des Droits de l'Homme et du Citoyen." 26 Août—3 Novembre, 1789, §13. Repeated word for word in the Constitution of 1791, §13. "Toutes les contributions et charges publiques seront supportées proportionnellement par tous les citoyens et par tous les propriétaires à raison de leurs biens et facultés." Acte constitutionnel sur les Impôts de 12 Oct.—6 Nov., 1789, § 1. "Les contributions seront réparties entre tous les contribuables à raison de leur facultés." Constitution du 5 Fructidor, An III (1795), § 306. The work of Hélie, *Les Constitutions de la France*, 1880, contains all the clauses referred to. See pp. 32, 53, 269 and 461.

Throughout the French Revolution, however, with only one exception,⁶ the faculty tax was held to mean a proportional, not a progressive tax. And even in this one exceptional case, as we have seen,⁷ the Convention refused to apply the interpretation to taxes in general, making it applicable only to forced loans. The attempt in 1793 to put this interpretation into the Declaration of Rights of the new Constitution, was a failure. In 1795 Villetard again endeavored to convince the legislature that the word "faculty" in the Constitution necessarily implied progressive taxation. He was, however, unable to overcome the opposing arguments of Dauchy⁸ or to carry the Assembly with him.

In the cahiers also the overwhelming mass of documents, some of which use the term faculty, advocate proportional taxation. This is a perfectly explicable phenomenon when we remember that one of the chief objects of the Revolution was to abolish the manifold exemptions and to bring about equality of taxation.⁹ The only two cases where progressive taxation was demanded in the cahiers will be mentioned below. Later on, in the French constitutions of 1814¹⁰ and 1830,¹¹ the term faculty tax seems to be used in the sense of a proportional tax on property. It was, however, not so understood by the legislature, which continued the revolutionary system of taxation

⁶ See the law of 1793, p. 214 of this monograph.

⁷ See above, pp. 33, 34.

⁸ Dauchy, *Rapport contre le Système de l'Impôt Progressif fait à la Séance du 10 Frimaire de l'an V, au Nom de la Commission des Finances*. Cf. Stourm, *Bibliographie*, etc., p. 261.

⁹ A. Lichtenberger, *Le Socialisme et la Révolution Française*, 1899, p. 26.

¹⁰ "Les Français contribuent indistinctement, dans la proportion de leur fortune, aux charges de l'État." Charte Constitutionnelle du 4 Juin, 1814, § 2. In Hélié, *op. cit.*, p. 886.

¹¹ Charte Constitutionnelle du 7 Août, 1830, 82; Hélié, *ibid.*, p. 988.

according to revenue; and in the constitution of 1848 the old words "faculty and fortune" are again employed to designate the proportional tax.¹²

The idea that faculty or ability is measured by income obtained a firm foothold in theory through the celebrated maxim of Adam Smith that "the subjects of every state ought to contribute . . . as nearly as possible in proportion to their respective abilities, that is in proportion to the revenue which they respectively enjoy," etc. For some time, as a result, the theorists regarded the proportional income tax as the ideal, which ought to be substituted for the whole existing system of taxation.

It was not long, however, before a slightly different interpretation was put on faculty. Income was still regarded as the test of faculty, but the definition of income was altered, or rather only a portion, in lieu of the whole, of the income was henceforth regarded as the standard of ability.¹³ Only that part of income which exceeded what was necessary for existence was declared taxable. The idea, as we know, had already been developed by the advocates of the give-and-take theory of taxation, like Steuart, Bentham, Forbonnais and a whole host of German writers in the first half of this century. But the clear-income theory, as it is called, was adopted also by the advocates of the faculty principle. That is to say, taxation as demanded by the faculty principle should be propor-

¹² "Chacun contribue à l'impôt en proportion de ses facultés et de sa fortune." *Constitution du 4 Nov., op. cit.*, 1848, § 15. In Hélie, *op. cit.*, p. 1104.

¹³ A curious and little known interpretation of the term "ability" is found in the eighteenth century in the administration of the English local poor rate. The "ability" of the taxpayer was normally to be found in the actual rent of his property, but the court held that some regard should be paid *ad statum et facultates* and interpreted this to mean the number of the family. Cf. the case in 1 Bott., 119. It has already been pointed out that the English income tax later on made abatements according to the size of the family.

tional indeed, but proportional only to that part of the income which exceeded a definite sum. In other words, the minimum of subsistence should be exempted. It is readily seen that the resulting tax would not be strictly proportional, but that it would be graduated as to the entire income, although it would be proportional to a certain excess of income.

The entering wedge, which thus began to modify the conception of faculty, was soon pushed further in. The original idea, as we have seen, was that of production. Whether the product was taken as it was received, in the shape of income, or as it permanently remained in the shape of property, is immaterial so far as this point is concerned. Both property and income, as tests of faculty, had regard to conditions of production. As soon, however, as a demand was made for the exemption of the minimum of subsistence, a new factor was introduced,—namely, the conditions of consumption. What the individual received or produced in the way of income was no longer the only consideration; the ability to apply this product to the satisfaction of his necessary wants became an equally cogent factor.

It was, however, only a step to enlarge the conception of consumption. Not alone the satisfaction of necessary wants, but the satisfaction of all wants, now became the watchword. Faculty was declared to consist not alone in the power of production or the extent of product, but also in the power to use the product in order to satisfy all one's wants. The conditions which limit faculty are to be found not only in the amount of the income, but in the demands that are made upon the individual in disposing of his income. In other words, the idea of burden, or of sacrifice, was introduced. Equality of pressure, or equality of sacrifice, now became a fundamental consideration;

and faculty, or capacity to pay taxes, was henceforth declared to be measured by that proportion of his product or income, the loss of which would impose upon the individual an equal burden or sacrifice with his neighbor.

The doctrine of faculty as reinvigorated by the conception of sacrifice was made the starting point of a new scientific movement. Some writers, like the German Rau, declared the two ideas virtually synonymous. Some, like John Stuart Mill, entirely dropped the conception of faculty, and maintained that the only test of just taxation was equality of sacrifice. Finally, other more modern authors have sought to combine the two ideas, contending that the conception of faculty can really be grasped only when interpreted in the light of equal sacrifice, or when conditioned by it.

What, now, were the conclusions drawn from this doctrine of equal sacrifice,—a doctrine which, as we shall see, is by no means so new as it has been generally assumed to be, and which is found in many of the writers who have almost universally been passed over in the history of the science of finance? The argument may be expressed as follows:

All individual wants vary in intensity, from the absolutely necessary wants of mere subsistence to the less pressing wants which can be satisfied by pure luxuries. Taxes, in so far as they rob us of the means of satisfying our wants, impose a sacrifice on us. But the sacrifice involved in giving up a portion of what enables us to satisfy our necessary wants is very different from the sacrifice involved in giving up a portion of what enables us to satisfy our less urgent wants. If two men have incomes of one thousand dollars and one hundred thousand dollars respectively, we impose upon them not equal, but very unequal, sacrifices if we take away from each the

same proportion, say ten per cent. For the one thousand dollar individual now has only nine hundred dollars, and must deprive himself and his family of necessities of life; the one hundred thousand dollar individual has ninety thousand dollars, and if he retrenches at all in his expenditures, which is very doubtful, he will give up only great luxuries, which do not satisfy any pressing wants. The sacrifice imposed on the two individuals is not equal. We are laying on the one thousand dollar man a far heavier sacrifice than on the one hundred thousand dollar man. In order to impose equal sacrifices we must tax the richer man not only absolutely, but relatively, more than the poor man. That is, the tax must be not proportional, but progressive; the rate must be lower in the one case than in the other. Since our wants shade imperceptibly into each other, from absolute necessities, to comforts, to comparative luxuries, to extreme luxuries, logic would require the progression to be gradual.

This doctrine was soon assailed from several sides. Some, like Leroy-Beaulieu, opposed it simply because they denied the validity of the sacrifice theory as over against the benefit theory. They may, however, be passed over here, as they have already been discussed under the head of advocates of the benefit theory. Others, like Mill, asserted that the doctrine was "too disputable entirely," without clearly showing, however, in what way it could be disputed. For they still believed in the equality-of-sacrifice doctrine, although they did not desire to go beyond the exemption of the minimum of subsistence. Others, again, among recent writers, have accepted the conclusion as to progressive taxation, but maintain that the premises should be slightly altered. Others, finally, have pointed out that the conclusion itself should be somewhat changed.

Let us take up the last point first. If we accept the argument, so it was said, it follows that the rate of progression should continually increase until finally the whole income or property would be swallowed up by the tax. This is a common objection, and one of the favorite arguments with opponents of progressive taxation. It may be traced as far back as the last century. Jollivet, for example, called the progressive tax the vulture which consumes its own entrails.¹⁴ In answer to this it was pointed out that the progressive rate would satisfy the demands of theory by applying only to the successive increments of property or income, so that the hundred per cent rate, even if it were ever reached, would never apply to the entire income, and that the tax therefore could never confiscate the whole. Many of the advocates of progressive taxation, moreover, hold that the rate of progression ought itself to be degressive. This was deemed to follow logically from the argument above. For if the intensity of our wants differs very considerably with different objects, the loss of a given sum of money will affect the poor man and the rich man very unequally; because in the one case it trenches upon necessities, in the other case it does not. In proportion, however, as we approach the less necessary wants, the difference in intensity diminishes, until finally, when we deal with large deductions from large incomes, there is virtually no difference in the intensity of the wants because these amounts serve to satisfy wants for extreme luxuries, the loss of which will be of equally little importance. Therefore the rate of taxation should gradually increase up to a certain point, after which the progression of the rate should decrease with the difference in the intensity of the

¹⁴ "L'impôt progressif, en dernière analyse, c'est le vautour déchirant ses propres entrailles." J. B. M. Jollivet, *De l'Impôt Progressif, et du Morcellement des Patrimoines*, 1793, p. 96.

wants, until finally when the point is reached beyond which the wants are of equally little importance, the rate should be the same. In other words taxation should be progressive, but the rate of progression should itself gradually decrease. Equality of sacrifice therefore leads to degressively progressive taxation.

We come, now, to those writers who accept the conclusion, but desire a change in the premises. For instance, some, like the recent Austrian economist, Meyer, while approving progressive taxation, think that the premises prove too much. If the doctrine of equal sacrifice is to be interpreted as meaning that the intensity of the wants, which remain unsatisfied because of the tax, must be equal, then the tax would have to take from the larger income the whole difference between it and the smaller income, as only thus could equality of sacrifice in the sense indicated be attained. But this, they hold, would be rank communism. These writers, therefore, propose to measure the equality of the sacrifice in a different way,—not by the intensity of the wants that remain unsatisfied because of the tax, but by the degree in which the tax increases the intensity of the last wants that are actually satisfied. The stress is laid upon the satisfied, not the unsatisfied, wants.

This objection, however, is of little weight, because it ascribes an arbitrary meaning to the word “equal.” When economists speak of equal sacrifice they mean relatively proportional sacrifice. When we advocate equality of taxation, we certainly do not mean that the identically same amount should be taken from each one; for that would involve the grossest inequality. When we say that taxes should be equal, we mean that the burden should be proportional. Whether the proportion should be a strict numerical or a relative proportion—

that is, whether the rate should be the same or different—depends on the answer we give to certain fundamental questions. It is perfectly conceivable, for instance, that a truer proportion might be found through a so-called progressive tax, than through what is commonly called a proportional tax. That was the view of Robespierre and the French Convention when it decreed progressive taxation in the following words: "In order to attain a more exact proportion in the division of public burdens which every citizen should support according to his faculties, a graduated and progressive tax shall be established on luxury and property, real as well as personal."¹⁵ In the same way, when we say that the sacrifice should be equal, we mean with John Stuart Mill, "that each person shall feel neither more nor less inconvenience from his share of the payment than every other person experiences from his." "Equal" sacrifice is thus merely a rough way of expressing the idea of "proportional" sacrifice. In assuming that "equal sacrifice" necessarily implies that "the intensity of the wants that remain unsatisfied because of the tax" must be equal, these objectors really confound equal sacrifice with arithmetical equality. All that is implied in the doctrine of equal sacrifice is that the pressure must be relatively proportional, not that it must be identically the same. It is the same mistake as to assume that equality of taxation means that every one—rich and poor—should pay precisely the same amount. The amount paid is identical or equal in one sense, and yet such taxation would be grossly unequal in the usual sense

¹⁵ "La Convention Nationale décrète comme principe que, pour atteindre à une proportion plus exacte dans la répartition des charges que chaque citoyen doit supporter en raison de ses facultés, il sera établi un impôt gradué et progressif sur le luxe et les richesses tant foncières que mobilières." Loi du 18 Mars, 1793. In Hélie, *Les Constitutions de la France*, 1880, p. 359.

of the term "equal taxation." Equality as used in taxation does not mean sameness, but relative proportionality.¹⁶

It makes no difference, therefore, whether we lay the stress on the satisfied or on the unsatisfied wants. The explanation is identical in both cases. Granting the graduation in human wants, a tax which takes away the possibility of satisfying some wants changes the intensity of the last want actually satisfied, just as it in the same way changes the intensity of the next urgent want that remains unsatisfied. We are simply looking at the same fact from two different standpoints. The theory is not altered a whit. If the imposition of a tax makes me abandon my outlay for amusements in order that I may be able to purchase clothing, the intensity of my last want actually satisfied is increased (because the desire for cloth-

¹⁶ Professor Edgeworth has recently made an attempt to distinguish between equal sacrifice and proportional sacrifice, each of them a sub-division of a larger genus which he calls "like sacrifice." See "The Pure Theory of Taxation," in *The Economic Journal*, vii, 1897, p. 557. From the mathematical point of view this is of course possible. Equal sacrifice would then denote the sacrifice of an absolutely equal amount of utility, proportional sacrifice would denote that of an equal proportion of utility. The distinction is, however, of no practical importance, because the demand for absolutely equal sacrifice in the formal mathematical sense has never, so far as I know, been advanced by any one. Equality in the ordinary sense of the term just as frequently implies relative equality as absolute equality. Webster e. g. defines equality as "agreement in quality or degree." Equality in degree, or relative equality, is precisely what Edgeworth calls proportional sacrifice. Not only has "equal sacrifice" in discussions in taxation always meant proportional sacrifice, but Edgeworth himself in the latter portion of his essay uses the terms interchangeably, telling us expressly that "it has seemed best, as most agreeable to usage, to employ the term "equal" generally, covering *proportional* as well as *equal* in the proper sense." *Op. cit.*, p. 566, note 1.

ing is more pressing than that for amusements), but the intensity of my next urgent want that remains unsatisfied is equally increased, because I now cannot afford amusements, while formerly I could afford amusements but could perhaps not afford more expensive enjoyments.

This, then, was the theory of progressive taxation resting on equality of sacrifice. A number of recent Dutch writers, who had already in the seventies accepted the final-utility theory of Jevons, applied his theory to the doctrine of progressive taxation just discussed. According to that more modern nomenclature the theory might be put as follows:¹⁷

Every satisfaction of human wants implies the existence of utility in the commodity which provides this satisfaction. The value of any commodity, however, is nothing but the expression of our estimate of its marginal or final utility, *i. e.*, the serviceableness of the last usable or marginal increment of the supply to satisfy some particular wants. Since the intensity of our wants and therefore their marginal or final utility decreases as we ascend from the lower or more pressing to the higher or less urgent wants, and since larger incomes afford the means of satisfying these less intense wants, a strictly proportional tax would involve smaller sacrifices in the case of the larger incomes. Strict equality of sacrifices in the sense of relatively proportional diminution of burden thus involves progressive taxation. It is a well established fact, however, that the number of wants increases as their intensity diminishes. The urgent wants of existence are very pressing indeed, but limited in number; the less urgent wants continually increase in number and variety with wealth and civilization. After a certain point,

¹⁷ For a fuller statement of the modern theory of marginal utility, see Seligman, *Principles of Economics*, ch. 12.

therefore, the differences between the intensity (and the marginal utility) of wants diminishes with the increase of their number and area, until finally when we come to the very large incomes the possibility of satisfying almost all wants becomes equal. Hence while taxation should be progressive, the rate of progression should itself diminish until ultimately the tax becomes proportional.

The necessity of progressive taxation resting on this gradual decrease of the marginal utility of wants was worked out arithmetically by some of the Dutch authors by constructing the following tables. Each individual is assumed to have an income which he values at a certain percentage; *i. e.*, the marginal utility of each successive grade of income diminishes as the income increases. In order to ascertain the enjoyment of satisfactions, which would be diminished by a tax, we have simply to multiply the amount of each grade of income by the marginal utility. If, for instance, C had an income of \$3,000, of which the marginal utility of the first \$1,000 was 100 per cent, of the second 95 per cent, and of the third, 91 per cent, he would have this quantity of enjoyment:

\$1,000 at 100 per cent.....	\$1,000
\$1,000 at 95 per cent.....	950
\$1,000 at 91 per cent.....	910
	<hr/>
	\$2,860

In this way we may construct the following table:

A has an income of \$1000			{ which he values for the sat- isfaction of his wants at			100 %	{ The whole is then } worth to him			\$1000
B	"	additional 1000	"	"	"	95	"	"	"	1950
C	"	" 1000	"	"	"	91	"	"	"	2860
D	"	" 1000	"	"	"	87.5	"	"	"	3735
E	"	" 1000	"	"	"	84.3	"	"	"	4578
F	"	" 1000	"	"	"	81.3	"	"	"	5391
G	"	" 1000	"	"	"	78.4	"	"	"	6175

Now suppose a strictly proportional tax is imposed. If the tax is three per cent, then the amounts paid would be:

A	\$30, whose marginal utility is	100	% i.e.,	\$30.00.	This is 3.	% of the total	\$1000
B	60, " "	95	"	57.00.	" 2.923	" "	1950
C	90, " "	91	"	81.99.	" 2.863	" "	2860
D	120, " "	87.5	"	105.00.	" 2.811	" "	3735
E	150, " "	84.3	"	126.45.	" 2.762	" "	4578
F	180, " "	81.3	"	146.34.	" 2.714	" "	5391
G	210, " "	78.4	"	164.64.	" 2.666	" "	6175

The ratio of sacrifice to enjoyment is, as we see, three per cent in the case of A, 2.92 in the case of B, and 2.67 in the case of G. In other words, we have an inequality of sacrifice, produced by a seeming equality or proportion in the tax. In order to bring about a real equality, so that the ratio of sacrifice to enjoyment may be three per cent in each case, it would be necessary to tax¹⁸

A,	on his \$1,000.....	3.	%
B,	" 2,000.....	3.0790	"
C,	" 3,000.....	3.1428	"
D,	" 4,000.....	3.2014	"
E,	" 5,000.....	3.2584	"
F,	" 6,000.....	3.3155	"
G,	" 7,000.....	3.3755	"

In other words, in order to produce equal sacrifice we must have a progressive rate of taxation.

Thus far had the Dutch economists gone. The arithmetical proof seemed to be complete. The logical necessity of progressive taxation as an outcome of the equal-sacrifice theory, or the marginal utility theory, seemed to be put on absolutely secure mathematical foundations. It was reserved, however, for another Dutch writer to use the same mathematical arguments in order to overthrow

¹⁸ The upper figures are those of Bok, *De Belastingen in het Nederlandsche Parlement van 1848-1888*, (1888), p. 177. The lower table is taken from Cohen-Stuart, *Bijdrage tot de Theorie der progressieve Inkomstenbelasting*, 1889, p. 110, who makes a slight correction in the figures of Bok.

the conclusion. In a recent and most ingenious work, which will be discussed more fully in the historical appendix, Cohen-Stuart shows that the whole elaborate system of computation is erroneous, and that progressive taxation is by no means a logically necessary conclusion from the assumed premises of a decrease in final utility.

It is perfectly possible, in other words, to construct tables which would lead not to progression, but to proportion and even to regression, although in each case we might assume that the successive increment of income is worth less to the owner.

For instance:

A	has an income of \$1000	{ which he values at }	100.	%	{ The whole is then worth to him }	\$1000
B	" additional 1000	"	95.	"	"	1950
C	" " 1000	"	93.8	"	"	2888
D	" " 1000	"	93.	"	"	3818
E	" " 1000	"	92.41	"	"	4742

If the tax is three per cent, then the amount paid would be:

A	\$ 30	{ which he values at }	100.00	% i.e., \$30.00. This is 3.	% of the total \$1000	
B	60	"	95.	" " 57.00.	" 2.923	" 1950
C	90	"	93.8	" " 84.42.	" 2.923	" 2888
D	120	"	93.	" " 111.60.	" 2.923	" 3818
E	150	"	92.41	" " 138.61.	" 2.923	" 4742

In order to make the ratio of sacrifice to enjoyment three per cent in each case, it would be necessary to tax all the others 3.079 per cent, that is, to tax all the others *proportionally*.

Finally, let us take a third case:

A	has an income of \$1000	{ which he values at }	100.	%	{ The whole is then worth to him }	\$1000
B	" additional 1000	"	80.	"	"	1800
C	" " 1000	"	77.	"	"	2570
D	" " 1000	"	76.4	"	"	3334
E	" " 1000	"	75.6	"	"	4090
F	" " 1000	"	75.	"	"	4840

If the tax is three per cent, then the amounts paid would be:

A	\$30	{ which he values at }	100.0	% i.e., \$30.00.	This is 3.	% of the whole	\$1000
B	60	"	80.	" "	48.00.	"	1800
C	90	"	77.	" "	69.30.	"	2570
D	120	"	76.4	" "	91.68.	"	3334
E	150	"	76.5	" "	113.40.	"	4090
F	180	"	75.	" "	135.00.	"	4840

In order to make the ratio of sacrifice to enjoyment three per cent in each case, it would be necessary to tax

A	on his	\$1,000.....	3.	%
B	"	2,000.....	3.375	"
C	"	3,000.....	3.333	"
D	"	4,000.....	3.273	"
E	"	5,000.....	3.247	"
F	"	6,000.....	3.226	"

That is, if we omit A, equality of sacrifice could be attained only by taxing the larger income at a *lower* rate.

The objection might be made that there is still a progression from A to B. But Cohen-Stuart explains this by showing that it is due to an error in the assumption. It is assumed that the first \$1,000 will have a marginal utility of 100 per cent. This is plainly erroneous. For if the last \$30 paid on a tax have a marginal utility of 100, the marginal utility of other parts of the \$1,000 must naturally be more than 100. And if we assume that the marginal utility of the whole \$1,000 is 100, then the marginal utility of some parts must be less, and of others more, than 100; since there can be no such sudden jumps as from \$1,000 to \$2,000, etc. This would obviously be true of every successive \$1,000. Thus if we assume that the average marginal utility differs from the marginal utility of the portion subtracted as a tax, we could construct a table of average marginal utilities somewhat like the following:

A	has	\$1000	income	with	an	average	marginal	utility	100	%	=	total	\$1000
B	has	an	add'l	\$1000		"	"	"	45	"	=	"	1450
C	"	"	1000	"	"	"	"	"	37	"	=	"	1820
D	"	"	1000	"	"	"	"	"	33	"	=	"	2150
E	"	"	1000	"	"	"	"	"	31	"	=	"	2460
F	"	"	1000	"	"	"	"	"	29	"	=	"	2750

If we again assume a proportional tax of three per cent, the amounts paid would be:

A	\$30	whose	marginal	utility	is	50	%	=	\$15	i.e.	. . .	1.5	%	of	\$1000
B	60	"	"	"	"	40	"	=	24	"	. . .	1.655	"	"	1450
C	90	"	"	"	"	35	"	=	31.50	"	. . .	1.733	"	"	1820
D	120	"	"	"	"	32	"	=	38.40	"	. . .	1.786	"	"	2150
E	150	"	"	"	"	30	"	=	45	"	. . .	1.829	"	"	2460
F	180	"	"	"	"	28.5	"	=	51.30	"	. . .	1.865	"	"	2750

In order to make the relation between sacrifice and enjoyment equal for all, *i. e.*, one and five-tenths per cent, it would be necessary to tax: ¹⁹

A	.....3.	%	.....on	his	.....\$1,000
B	.....2.719	"	.....	"	.....2,000
C	.....2.600	"	.....	"	.....3,000
D	.....2.520	"	.....	"	.....4,000
E	.....2.460	"	.....	"	.....5,000
F	.....2.412	"	.....	"	.....6,000

Here, then, we have a continually decreasing rate. This would be regressive taxation of the purest type.

It may be said that all these tables are arbitrary. This may be granted. Yet, at all events, they do prove that progressive taxation does not follow as a logical necessity simply from the fact that greater incomes are worth relatively less than smaller ones because of the decrease in the intensity of our wants.

Thus the whole elaborate mathematical proof of progressive taxation turns out to be no proof at all. According as we choose our figures we can prove the possibility of progressive, or of proportional, or of regressive taxa-

¹⁹ Cohen-Stuart. *Op. cit.*, pp. 112-113.

tion. Hence the simple fact of the gradual decrease of marginal utility does not necessarily lead to progressive taxation, nor on the other hand does it necessarily lead to proportional taxation. From the equality-of sacrifice doctrine of itself we can not deduce any mathematically exact scale of taxation, whether progressive or anything else.

It is true that Cohen-Stuart later attempts to prove that a hypothetical curve representing a decrease in marginal utility in all probability corresponds to the true curve, and that this hypothetical curve leads to progressive taxation. But as we shall see more fully in the historical appendix number five below, his methods, though extremely ingenious, are not entirely convincing, and he is virtually unable to overcome the arguments with which he has himself demolished the older theory.

This brings us to the very core of the objection to the equal-sacrifice theory, regarded as the paramount consideration in the construction of any definite rate of progression. The imposition of "equal sacrifices" on all taxpayers must always remain an ideal impossible of actual realization. Sacrifice denotes something psychical, something psychological. A tax takes away commodities which are something material, something tangible. To ascertain the exact relations between something psychical and something material is impossible. No calculus of pain and pleasure can suffice, for no attempt to reduce the heterogeneous to the homogeneous can ever succeed.

Even assuming, however, that this could be done, the case for the advocates of equal sacrifice would not be much better. The sacrifice occasioned by a tax is only one factor in the problem, and may be a minor factor. Two men may have the same income, which they may value at very different rates. The one may be a bachelor,

the other a man with a large family dependent on him; the one may be well, the other ill; the one may have simple tastes, the other extravagant leanings; the one may be a miser, the other a spendthrift; the one may earn his income, the other may receive it as a gift; the one may spend his income in a village where prices are low, the other may be compelled to spend it in a metropolis where prices are high. The variations in each particular case are numberless. It is quite impossible to say whether the identical tax on people of identical income or property will produce the same relative pressure, *i. e.*, occasion an equal (that is, a proportional) sacrifice. Since sacrifice bears no definite relation to the amount of commodities, it is just as conceivable that in individual cases a regressive tax may produce just as much, or as little, equality of sacrifice as a proportional or a progressive tax. The attempt to ascertain a mathematical scale of progression, so as to avoid a charge of arbitrariness, is foredoomed to failure. The equality-of-sacrifice theory, taken by itself, cannot lead to any fixed rate of taxation, whether proportional or graduated.

A supposed way out of the difficulty has recently been outlined. One of the leaders of the Austrian school of pure economics, Professor Sax, has boldly maintained that taxation has nothing at all to do with equal sacrifice, and that progressive taxation may be upheld on what he calls purely economic grounds, apart from questions of justice or ethics. This theory is deemed by its author so important and conclusive that it deserves a fuller discussion.²⁰

Sax bases his very diffusely expressed, but acutely rea-

²⁰ It will be found in his book, *Grundlegung der theoretischen Staatswirtschaft*, 1887, esp. §§ 81, 82; and repeated in his essay, "Die Progressivsteuer," in the first number of the Austrian *Zeitschrift für Volkswirtschaft, Socialpolitik und Verwaltung* (1892).

soned, exposition on the assertion that the problems of taxation have nothing to do with ethical, but only with purely economic, considerations; and that therefore the ideas of justice and of equal sacrifice are entirely irrelevant. He divides all human wants into individual and collective. Every person has wants that attach to him simply as an individual; but he also has wants that arise from his political association with other men. It is with these "collectivistic"²¹ wants that the science of finance has to deal. The state alone can satisfy the collectivistic wants; and in order to make it possible for the state to satisfy these wants, the individual must support the state. This is the basis of taxation.

The problem of taxation is: How much of a man's stock of goods shall he devote to these collective wants? This must depend, says Sax, on the marginal utility of the goods taken from the individual. That is to say, our wants vary in intensity, ranging from the most pressing wants or those for absolute necessities of life—through several grades until we reach pure luxuries. The higher

²¹ It may be observed, in passing, that Sax's nomenclature is not quite exact. There is, indeed, a distinction between individual and collective wants, but it is not the one mentioned by Sax. The individual wants are indeed those that attach to one as an individual; but opposed to these are the social or collective wants which can be satisfied only through some form of union with other individuals. There must be an association or collection of individuals, and the wants are hence termed social or collective wants. These are satisfied by all the various forms of modern social and collective organizations. On the other hand we must distinguish between the private and the public wants of the individual. Private unions are voluntary, and take in only portions of society. Organized society as a whole is called the state, and membership in the state is compulsory. The wants which can be satisfied by the state alone are public wants. All public wants are necessarily social or collective wants; but all collective wants are not necessarily public wants. The science of finance has to deal only with public wants, not with collective wants in general.

we go in the stock of goods at our disposal, the greater, to a certain point, will be the decrease in the intensity of our wants.²² The value of any particular quantity of goods is therefore an expression of its marginal utility, that is, the serviceableness of the last usable portion to satisfy some particular wants. The problem of equal taxation is to take away from individuals such quantities of goods that each individual will value the amount taken from him just as highly as his neighbor will value the amount taken from him.²³ In other words, the marginal utility of the commodities taken must be equal. This he calls the economic principle of equivalence.²⁴ But as we have seen that the marginal utility varies inversely as the amount, the marginal utility of the commodities taken from two unequally wealthy individuals can be equal only when we take not the same, but a relatively larger, proportion from the wealthier individual. If we took the same proportion from two unequal stocks of goods, A and B, the marginal utility of the amount taken from the smaller stock A would be far greater than the marginal utility taken from the larger stock B. In order to make the marginal utility equal we must take a larger proportion from B than from A. In other words, we must have

²² "Die Progression der Intensitätsabnahme der Bedürfnisempfindungen," as Sax puts it. Cf. *Grundlegung der theoretischen Staatswirthschaft*, p. 511. Sax does not use the words "marginal utility" in his book, although he does employ them in his subsequent essay.

²³ "Die Aufgabe der Besteuerung ist, aus den Privatwirthschaften Güterquanten den Collectivbedürfnissen zuzuführen welche dermassen verschieden bemessen sind, dass jedes Wirthschaftssubjekt nach dem thatsächlichen Stande des Individualwerthes innerhalb seines Bereiches das seinige eben so hoch werthet wie jedes Andere der von ihm eingeforderten Güter" *Ibid.*, p. 514.

²⁴ "Aequivalente. Dieses eine Wort bedeutet die relative Steuer-austheilung in nuce." *Zeitschrift für Volkswirthschaft*, etc., p. 90.

progressive taxation up to a certain point.²⁵ "Equality of values taken," not "equality of sacrifice," is the purely economic basis of taxation.

Although Sax heralds this as a great discovery, we may be pardoned for believing that its value for the purposes of the theory of progressive taxation has been considerably exaggerated.

In the first place the doctrine of the gradation of wants had long since been elaborated by the Austrian economists; the final-utility theory of Jevons had been applied to the problems of taxation by the Dutch economists; and lastly, the formulation of the whole doctrine had been developed by Meyer without any suspicion on his part that he had thereby made any specially new dis-

²⁵ "Die Progression der Intensitätsabnahme kann nur innerhalb gewisser Grenzen merklich sein. Ist man aber einmal bei den Bedürfnissen von absolut sehr niedrigen Stärkegraden angelangt, so können weitere Abstufungen nur mehr an sich höchst geringe Differenzen ergeben die sich der Messbarkeit entziehen." *Grundlegung*, p. 511.

Professor James, in his review of Sax's book in the *Political Science Quarterly*, v. p. 168, gives a partially erroneous account of Sax's meaning. James says, "the state may, therefore, for a given service, take very different sums from different private economies, because the final utility of the service varies with the amount of goods." This, however, is not Sax's meaning. If individuals were to pay taxes in accordance with the final utility of the services, we should practically be going back to the give-and-take theory of taxation which Sax expressly disclaims. It is not the final utility of the state service, but the final utility of the commodities taken away in the shape of taxes, which Sax emphasizes. The final utility, or value, of the state services has nothing to do with the question. It is the final utility of the commodities that the individual pays to the state which must be equal; and it is because the final utility of these varies inversely as the whole stock of goods that Sax demands progressive taxation. We must be careful not to confuse the two notions, as does Professor James. Sax himself protests against a similar confusion of which an Austrian economist is guilty. Cf., "Die Progressivsteuer," p. 91, note.

covery. Now the only difference between the equal sacrifice or marginal utility theory of his predecessors and the "equivalence" theory of Sax is a mere difference of words. The equal-sacrifice theory says that the tax must take away such amounts that the resulting pressure or the sacrifice of enjoyments may be relatively proportional; the "equivalence" theory says that taxation must take away relatively proportional amounts. But the taking away or giving up of anything involves a pressure or a sacrifice, whether the sacrifice be voluntary or compulsory. Hence, "equality of values taken" implies an "equality of sacrifice" to the individual.

In fact, a "purely economic" theory of taxation is as impossible as a "purely economic" theory of value, if it is meant that "pure economics" can make abstraction of psychological and therefore of ethical considerations. As soon as we introduce the conception of human wants and the means of satisfying these wants, we are dealing with questions of sacrifice of enjoyments. Equality of taxation, therefore, connotes an ethical problem, in the same sense that the general law of value and price connotes an ethical problem. The mediaeval theory of *justum pretium*, with its modern successors in the theories of fair wages, of reasonable railway rates, of trust prices, etc., shows how indissolubly are bound up the problems of ethics and economics. The problems of taxation are of no different kind. The situation is not altered in the least by regarding taxes as the satisfaction of collectivistic wants. If I have to spend money to support my relative, it is no less a sacrifice because these duties may be regarded as the satisfaction of individualistic wants, *i. e.*, wants which primarily affect me in the individual relations of my family. All the more must the compulsory subtraction from my wealth by a tax be declared a sacrifice,

even though it be regarded as the voluntary satisfaction of collectivistic wants. Hence, whether we call it the purely economic theory or the ethical theory of public finance is immaterial. The "equivalence" theory of taxation is simply another way of putting the marginal utility or equal-sacrifice theory. They do not oppose each other, they do not even supplement each other; correctly understood they are simply two distinct methods of explaining the same thing in slightly different words. It is impossible to take away relatively proportional values without inflicting relatively proportional sacrifices.

So far has the modern theory of progressive taxation gone. But if, as we have seen, the equality-of-sacrifice theory taken by itself cannot lead to any fixed rate of progression, must we then range ourselves with those who maintain that progressive taxation is illogical and unjust; and that there are no substantial arguments in its favor, while the opposing arguments are numerous and convincing? Is progressive taxation economically justifiable or not? Is it theoretically sound and practically expedient? These are the problems to which we must address ourselves after taking up somewhat in detail the various advocates of taxation according to faculty.

HISTORICAL APPENDIX III.

THE FACULTY THEORY LEADS TO PROPORTIONAL TAXATION

The earliest advocates of the faculty theory were concerned chiefly with a reform of obviously unjust systems of taxation. Their efforts were directed to bringing about some semblance of proportionality as over against the existing regressive systems. Thus we find the faculty theory at first used as a defense of proportion.

One of the earliest writers on taxation was Bodin. Bodin, as is well known, was in favor of taxation only as a last resort in extraordinary exigencies, since in his opinion the state could and should support itself in other ways. In so far, however, as taxes are necessary, justice should be observed; and justice consists in apportioning taxation according to family¹ But faculty seems to Bodin simply to denote means or property.² He does not analyze the matter any further.

In the same way many of the publicists of the seventeenth century laid down the principle that the burdens of taxation should be in proportion to the faculty, or the powers, of each.³ The Dutch writer, Boxhorn, expressly

¹"Sunt igitur ea vectigalia, si modo necessaria, probanda quae in omnes ordines *pro singularum facultatibus* exaequantur." Bodinus, *De Republica*, 1577, lib. vi.

²"Pro cuiusque opibus ac fortunis." In the French edition of 1577, we read: "Que chacun debuoit porter, eu égard aux biens qu'il auoit." *Les six Livres de la République*, p. 644.

³Thus Botero says in his *Della Ragione di Stati*, 1589: "Proprium est subditorum . . . *per facultates* principes magistratumque iuvare." —Bocerus, *De Jure Collectarum*, 1617, "Deinde quantitas illa distribuenda est *pro viribus* singulorum tum provinciorum tum civitatum etiam hominum." —Besold, *De Aerario*, p. 619: "Tributa ergo pro modo census et *facultatum* a singulis pensitabantur"—Klock, *De Con-*

tells us that the tax should be proportional to property in order that the burdens and sacrifices might be equally shared by all.⁴

Among English writers, one of the first to uphold this theory was Sheridan. Sheridan, however, leaves us in doubt whether he finds taxable ability to consist in property or in expenditure. He holds that "all subjects, as well the meanest as the greatest, are alike concerned in the common safety, and should therefore, according to their respective interests of riches or enjoyments, bear the charge in equal proportions."⁵ Again, at the beginning of this century, Friend expressed the common view in saying that "taxation is equitable when each member is taxed in proportion to his means of paying the tax." He goes on to explain that "the means, which an individual has to pay the demands of the state, must depend on the possession of the sum required by the state, or of property, which will procure that sum."⁶ This, he thinks, is the

tributionibus, 1634: "Collecta per aes et librum, hoc est secundum facultatem patrimonii imponi debet . . . ut onera commensurata sint viribus eorum." Cf. Rau, *Finanzwissenschaft*, (5th ed. 1865), § 253; and Neumann, *Die Steuer nach der Steuerfähigkeit*, 1887, p. 550.

⁴"In tributis aequalitatis maxima habenda ratio, quae in eo potissimum versatur, ut par sit eorum ratio ac paria hic onera sentiant, quorum pares in diversis licet rebus positae sitaeque sunt opes."—Boxhorn, *Institutiones Politicae*, lib. i, cap. 10, § 18, no. 9. For Boxhorn's general views on finance, see Laspeyres, *Geschichte der volkswirtschaftlichen Anschauungen der Niederländer*, etc. (1863), p. 239 et seq.

⁵"*A Discourse on the Rise of Parliament . . . of Taxes, Trade, and of the Interest of England in reference to France. In a letter from a Gentleman in the Country to a Member of Parliament.*" [By Thomas Sheridan] 1677, p. 146. The book has been reprinted in fac-simile by Saxe Bannister in his *Some Revelations of Irish History*, 1870.

⁶Wm. Friend, *The Principles of Taxation or Contribution according to Means*, etc., 1804, pp. 33-34.

In an earlier work devoted to a criticism of Pitts' income tax

same as saying that "taxation, to be equitable, must leave the subjects in the same relative situation to each other, in which they were the moment before the tax was paid."⁷ Frend is thus the real founder of the leave-them-as-you-find-them theory of taxation.

Among modern writers who have partly upheld the faculty theory of proportional taxation, the most important is Parieu. Parieu maintains that the "social-dividend" theory, as he terms it, would logically lead to the "most absurd practical consequences and the most shocking inhumanity."⁸ He considers it necessary to limit that theory by the doctrine of equality of sacrifice. The doctrine of equality of sacrifice, however, does not seem to him in itself a thoroughly safe doctrine, because it leads to progressive taxation, or "tends irresistibly to social levelling as the ideal."⁹ Parieu comes to the rather superficial conclusion that it is possible to combine the social-dividend and the equality-of-sacrifice theories, so as to make of them a compound which is nothing else than purely proportional taxation.¹⁰ In other words, Parieu opposes the give-and-take theory as inadequate, but objects to the sacrifice theory only because it leads to progressive taxa-

scheme, Frend puts the same principle in virtually identical language. See Wm. Frend, *The Principles of Taxation*, 1709, p. 11.

⁷ *Ibid.* p. 40. Walker, *Political Economy*, § 590, thus errs in ascribing the origin of this principle to the author of the *Edinburgh Review* article.

⁸ "Il faut arriver jusqu'aux conséquences pratiques les plus absurdes et aussi à l'inhumanité la plus choquante par la négation absolue de tout secours apporté à la situation de l'indigence et du malheur." Parieu, *Traité des Impôts*, p. 30 of 2nd ed. (1866).

⁹ "La théorie de l'égalité des sacrifices paraît placée sur la pente irrésistible qui conduit au nivellement social comme type de perfection." *Ibid.*, p. 26.

¹⁰ "Il semble possible de rapprocher la théorie du contrat onéreux et celle de l'égalité des sacrifices dans cette idée moyenne et simple qui proportionne l'impôt aux biens particuliers." *Ibid.*, p. 31.

n, which seems to him socialistic.¹¹ That is, he objects a premise, not because of the untenability of the pre-
mise, but because of the danger of the conclusion. This
is not a very logical proceeding.

On the other hand, a far larger number of the oppo-
nents of the benefit theory modify their demand for pro-
portional taxation by the introduction of the idea of the
minimum of subsistence, or even of the so-called clear-
come idea. Although they profess to advocate propor-
tional taxation, they in reality favor degressive taxation.
Let us study them a little more closely.

¹¹"La théorie de l'impôt progressif paraît partir de cette idée que
la société doit chercher à réaliser par l'impôt une égalité de situa-
tion, non relative à la masse des biens et aux propriétés acquises,
mais absolue pour la personne de chaque citoyen." Parieu, *op cit.*,
37.

HISTORICAL APPENDIX IV.

THE FACULTY THEORY LEADS TO DEGRESSIVE TAXATION.

The chief representative of this tendency is John Stuart Mill. Although often regarded as the true originator of the equality-of-sacrifice doctrine, Mill was not really the first to advance the idea. It is only the deplorable ignorance of the history of the science of finance among so many modern writers that could have ascribed to Mill doctrines which had been expounded long before him. Mill, however, was indeed the first to draw from this principle the conclusion of degressive taxation. Mill strongly objects to the *quid-pro-quo* theory, and lays down his general principle in the following words: "As in a case of voluntary subscription for a purpose in which all are interested, all are thought to have done their part fairly when each has contributed according to his means, that is, has made an equal sacrifice for the common object; in like manner should this be the principle of compulsory contributions; and it is superfluous to look for a more ingenious or recondite ground to rest the principle upon."¹ In another place he says: "Equality of taxation as a maxim of politics means equality of sacrifice. It means apportioning the contribution of each person toward the expenses of government so that he shall feel neither more nor less inconvenience from his share of the payment than every other person experiences from his."

Mill, however, thinks that the principle cannot lead to progressive taxation. The statement that "to take £100 from £1,000 is a heavier impost than £1,000 taken from

¹ *Principles of Political Economy*, book v, chap. ii, § 2; ii, p. 398, of Appleton's (1880) edition.

£10,000, seems to me too disputable altogether, and even if true at all, not true to a sufficient extent to be made the foundation of any rule of taxation. Whether the person with £10,000 a year cares less for £1,000 than the person with only £1,000 a year cares for £100, and if so, how much less, does not appear to me capable of being decided with the degree of certainty on which a legislator or a financier ought to act." Mill thinks that the portion of truth which the doctrine contains "arises principally from the tax which can be saved from luxuries, and one which trenches in ever so small a degree upon the necessities of life or what is conducive to the support or to the comfort of existence." Hence Mill concludes that the most equitable plan is to exempt a certain minimum of income, but to tax everything else above that proportionally—a theory which he erroneously seems to think originated with Bentham.

To this argument the rejoinder is obvious that the degrees of income which are "conducive to the support or to the comfort of existence" vary with the standard of life, and that according to Mill's own theory no really equitable fixed minimum of subsistence can be determined. If equality of sacrifice is the only defense of the exemption of the minimum of subsistence, we could not stop with this; for human wants shade into each other by imperceptible gradations. It is worth mentioning also that Mill strongly favors a progressive rate in the case of legacy and inheritance taxes;² and that he advocates differentiation in the rate of the income tax, according as the income

² In the first edition of his *Principles* Mill puts this as follows: "The principle of graduation (as it is called), that is, of levying a larger percentage of a large sum, though its application to general taxation would be a violation of first principles, is quite unobjectionable as applied to legacy and inheritance duties." Book vi, ch. ii, § 3. In the second edition, Mill changes the emphasis: "The principle

is a life income, or a perpetual income. It is remarkable that in espousing the latter demand Mill advances precisely the same argument which he refuses to accept in the discussion of graduation. "It is not because the temporary annuitant has smaller means," says Mill, "but because he has greater necessities, that he ought to be assessed at a lower rate." Yet the more urgent demands on the income of the life annuitant cannot be fixed by the government with any more "certainty" than the more urgent demands on the income of the poorer man. What is sauce for the goose is sauce for the gander. The reasoning is exactly the same. It seems illogical to uphold differentiation of taxation and to oppose progression of taxation. Moreover, although Mill is such a strong advocate of what he thinks is proportional taxation, it has been pointed out that he is really abandoning the whole contention. As Faucher truly says, "Exemption of any revenue is simply the entering wedge of progressive taxation."⁸ It is because this seems to him inevitable that Faucher objects to all income taxation. For progressive taxation, he thinks, reduces all to a common level of misery.⁴

The earliest important German writer to deduce degres-

of graduation, though its application to general taxation would be, in my opinion, objectionable, seems to me both just and expedient as applied to legacy and inheritance duties."

⁸"On pose le premier jalon de l'impôt progressif dès que l'on affranchit de la taxe sur le revenu certaines classes de contribuables." Léon Faucher, "De l'Impôt sur le Revenu," in his *Mélanges d'Economie Politique et de Finance*, i (1856), p. 57.

⁴"Oui, l'impôt progressif est au bout de l'impôt sur le revenu. Il en représente la fatalité. Aveugle qui ne la voit pas et insensé qui la dissimule . . . L'idéal de la loi agraire se trouve réalisé, car l'impôt étend alors sur les citoyens un niveau commun de misère." *Ibid.*, p. 59.—Cauwès, *Précis du Cours d'Economie Politique*, ii, p. 572, is in error in terming Faucher a partisan of progressive taxation.

sive taxation from the faculty theory was Rau. Rau confesses that in general a certain sum of money has a higher value for its possessor according as it forms a larger part of the amount available for expenses. From this he draws the remarkable conclusion that all will be able to give up a proportional part of their property with equal sacrifices. Proportional taxation is the most equitable and just.⁵ In another part of his work, however, Rau explains that he means a proportional taxation of clear income only, by which he understands the exemption of the minimum of subsistence; and this, he thinks, is fixed by the normal standard of life.⁶ Since this is exceedingly difficult of exact ascertainment, Rau has no objection to a tax on the whole income, which is graduated up to a certain point, in order to effect a virtually proportional taxation on the clear income. Later on, however, Rau is inconsistent enough to confess that the theory of sacrifice may logically lead to progressive taxation, which he rejects because of its dangerous tendencies.⁷

Somewhat later, another German writer went into the subject a little more fully. Umpfenbach is a staunch op-

⁵ "Mann kann annehmen, dass eine gewisse Geldsumme für den Besitzer einen desto höheren Werth hat, einen je grösseren Theil seines ganzen verwendbaren Gütervorrathes sie ausmacht und einen je grösseren Theil des gesammten ihm zu Gebote stehenden Gütergenusses sie folglich entspricht . . . Es werden daher Alle einen gleichvielsten Theil (Quote) der zu ihrer Verfügung stehenden Gütermenge ungefähr gleich leicht oder schwer abgeben können." Rau, *Finanzwissenschaft*, 1832-1837, § 253. 5th ed. (1864), iii, part 1, p. 395.

⁶ "Es ist gerecht und zweckmässig dass nur der Theil der ganzen Einnahme in Anschlag gebracht wird der den mittleren standesmäßigen Unterhaltsbedarf des Arbeiters und seiner Familie übersteigt, sowie überhaupt der mit einem Einkommen nothwendig verknüpfte Kostenaufwand in Abrechnung kommen muss." *Ibid.*, § 391; iii, part 2, p. 170.

⁷ *Ibid.*, § 400; iii, part 2, 195.

ponent of the give-and-take theory, and maintains that the only principle is to tax individuals according to their "economic capacity to pay."⁸ But this, he maintains, means proportional, not progressive, taxation, because in the eyes of the state equal revenue connotes equal faculty, for the reason that equal income yields equal enjoyment. The state has nothing to do with the subjective impressions of the taxpayer; how far a man's income may suffice for the satisfaction of his comforts and luxuries is purely a subjective matter. The state has no right to inquire into this unless we are willing to say that it is the function of the state to level inequalities of fortune. The whole theory of progressive taxation is simply a result of false sentimentalism.⁹ The only really legitimate kernel of progressive taxation consists in the exemption of a definite minimum of existence, because it is virtually impossible for the state to tax this.¹⁰

The only other German writers of any importance who advocate the degressive theory are those who have been influenced chiefly by Mill. Both Bergius and Pfeiffer, the authors of bulky volumes on public finance, follow

⁸ "Die ökonomische Steuerfähigkeit."

⁹ "Für die Finanzpolitik kann auf Grund menschlich allgemeiner Werthschätzung als Regel nur gelten, dass gleich grosses Einkommen gleich grosse Steuerfähigkeit hat, weil es in seiner Verwendung gleich grossen Genuss gewährt. Regelmässig verschieden, was dann die Besteuerungspolitik völlig unbeachtet lässt, ist die Genussrichtung; regelmässig übereinstimmend, worauf die Besteuerung fusst, ist die Genusshöhe . . . Die Finanz lässt durch die Besteuerung von jeder gleichen Genusshöhe gleichviel wegnehmen; aber sie ist nicht dazu da, um mit Hilfe und auf Kosten der Besteuerung der Subjectivität dieser oder jener Einzelnen zu einer opulenteren Genusshöhe des Auskommens zu verhelfen, als deren Einkommen entspricht." Umpfenbach, *Lehrbuch der Finanzwissenschaft*, 1859. Cf. 2nd ed. (1887), § 82, pp. 166-167.

¹⁰ "Mit Abzug des auf jedes Einkommen treffenden Existenz-minimums steht die einzige zulässige Steuerprogression fest." *Ibid.*, p. 173.

Mill almost word for word.¹¹ Pfeiffer, however, in demanding the exemption of the minimum of subsistence, desires that an allowance be made for the number of children. Vocke also finds the limit of progression to consist in the exemption of the minimum of subsistence.¹² And Helfferich takes virtually the same position.¹³

The advocates of degressive taxation as an outcome of the faculty theory of taxation are therefore very few in number. It is evident that their position is not a strong one, and that their attitude is based on a half-way reasoning. It is not surprising, then, that the great majority of writers of this school should go the whole length and plead for progression as a necessary outcome of the faculty theory of taxation. With this far larger wing we have now to deal.

¹¹ Bergius, *Grundsätze der Finanzwissenschaft*, 1865. Cf. esp. 2nd ed. (1871), pp. 407-410.—Pfeiffer, *Die Staats-Einnahmen*, 1866, i, p. 80; ii, pp. 26-34, 41-45, 538.

¹² W. Vocke, *Die Abgaben, Auflagen und die Steuern*, 1877, p. 473.

¹³ Helfferich, "Die allgemeine Steuerlehre" in Schönberg's *Handbuch der Politischen Oekonomie*, 3rd ed. 1891, iii, p. 136.

HISTORICAL APPENDIX V.

THE FACULTY THEORY LEADS TO PROGRESSIVE TAXATION.

The advocates of this doctrine are so numerous that it will conduce to clearness to divide this appendix into six parts, taking up first the earlier and especially the eighteenth century writers, then dealing in turn with the development during the nineteenth century in France, England, Germany, and Holland, and closing with a discussion of the most recent history in America and Great Britain.

The earliest statement of this principle is found in the first essay of Guicciardini, at the end of the sixteenth century.¹ Equality of taxation, we are told, consists not in everybody's paying the same rate, but in the payments being so arranged as to impose the same burden on all.² If both a poor man and a rich man pay to the state one tenth of their incomes respectively, even though the rich man's one-tenth is far more than that of the poor man, the poor man, in order to pay his one-tenth undergoes a far greater sacrifice than the rich man in paying his.³ For expenditures are of three classes, necessities, comforts and luxuries. A man with fifty ducats income cannot even satisfy his necessities, and if he pays

¹ For the essay of Guicciardini, see above, p. 135.

² "La egualità di una gravezza non consiste in questo, che ciascuno paghi per rata tanto l'uno quanto l'altra, ma che il pagamento sia di sorte che tanto s'incomodi l'uno quanto l'altro." *Op. cit.* p. 355.

³ "Quando un povero paga in commune una decima delle entrate sue e un ricco paga una decima ancora che la decima del ricco getti piu che quella del povero, pure multe piu si disordina il povero di pagare la sua decima che il ricco la sua" *Ibid.*

a tax he must do without some absolute necessities; he who has one hundred to one hundred and fifty can pay twelve or fifteen per cent in taxes, and will give up only comforts. But the recipient of from two hundred and fifty to three hundred ducats income can pay as much as one-fourth or one-third in taxes, and yet give up only what he would have spent in superfluities or what he would have added to his capital.⁴

Guicciardini, however, soon abandons this tack in order to take the more frankly socialistic attitude.⁵

⁴ "Le spese che fanno i cittadini sono di tre ragioni: alcune sono necessarie, altre si fanno per commodità, altra sono totalmente superflue. Chi ha di entrata 50 ducati o manco, non puo con questa entrata supplire alle necessità e se di questi ha a pagare una decima, bisogna che stremi alle spese che gli sono necessarie; il mediocre, chi ha di entrata 100-150 ducati, he il panno piu largo e paga una decima e un quarto, o una decima e mezzo col resecare le spese della commodità, ma non si restringe nelle cose necessarie; colui chi ha di entrata 250-300 ducati, se bene paga il quarto et il terzo delle entrate sue, non solo non restringe le spese necessarie, ma neanche manca alla commodità, spende quelli che avrebbe dissipato in spese superflue o accumulati nella cassa."

⁵ See above, p. 135.

A. The Eighteenth Century.

Coming to the eighteenth century, the earliest adherent to the progressive principle based on the faculty theory is the German Councillor Charles of Bayreuth, who wrote a treatise in French in 1722.¹ Councillor Charles or Rath Karl, as he was called in Germany, objected to the ordinary property tax because the same rate in the proportional tax would hit a man living in Paris more severely than one living in the country. It must be assumed, says he, that the prince is desirous of increasing the wealth of his subjects and of affording every one an equal facility to enrich himself. A purely mathematical equality in taxation will not suffice. What is needed is a geometrical relation.² Accordingly he proposes to divide the population into three classes, arranged according to the estates, for, says he, that which constitutes the wealth of a peasant does not make a nobleman rich, because of the difference in their positions.³ If we take by

¹ *Traité de la Richesse des Princes et de leurs États et des Moyens Simples et Naturels pour y parvenir*. Par. M. C. C. D. P. d. B., Allemand à Paris, 1722. An account of this is given in the article "Vermögensteuer" in the *Policey-und-Cameral-Magazin* von J. H. L. Bergius, vol ix, 1774, pp. 44-46, from which the following quotations are made. It is fully treated in J. W. von der Lith, *Neue vollständig erwiesene Abhandlung von den Steuern*, 1766, esp. pp. 203-208. I have not been able to find a copy of the French original. It does not seem to be in the National Library in Paris.

² "Die Absichten des Fürsten" gehen dahin "die Reichtümer seiner Unterthanen und des Staats zu vermehren, und einem Jedem eine gleiche Leichtigkeit zu verschaffen, sich zu bereichern . . . Eine bloße arithmetische Gleichheit, vermöge welcher Jeder nach dem zehnten Theil seiner Einkünfte geschätzt sei würde keineswegs diejenige Wirkung thun . . . Vielmehr wäre es weit rathsamer beyden Anlagen ein geometrisches Verhältniss zu bestimmen."

³ "Denn dasjenige was den Reichthum eines Bauern ausmache, mache einen Edelmann nicht reich, weil dieser ein weit mehreres bedürfe um sich in seinem Stande, zu unterhalten, als ein Bauer in dem seinigen."

taxation from a nobleman ten livres from one hundred, which constitute his entire income, we are taking a part of the necessary means of his existence; but if a peasant pays the same amount it takes only his superfluities, which should be the true and only subject of taxation. Furthermore, in each class the same argument would apply, and therefore the rate should be progressive. Accordingly, if we tax the wealthy ten per cent the less wealthy ought to pay only five per cent and so on.⁴

One of the earliest defenders of the same doctrine was Montesquieu, although his argument is not uniformly consistent. Montesquieu, as we know, gave the celebrated definition of taxes which classes him among the partisans of the benefit theory.⁵ Yet, when speaking of the progressive tax in Athens, he upholds it on entirely different grounds. "In the personal tax," says Montesquieu, "the proportion which would exactly follow the proportion of property would be unjust. The Athenian tax was just, although not proportional. If it did not follow the proportion of property, it followed the proportion of wants. It was held that every one had an equal amount necessary to his subsistence; that this necessary portion ought not to be taxed; that the useful came next, and that it ought to be taxed, but less than the superfluous."⁶ We see from this passage that Montesquieu

⁴"Es zahle zu einer Zeit in welcher jedermann den zehnten Theil von seinen Einkünften der Obrigkeit zinsen müsse, der Arme in dem arithmetischen Verhältnisse, nicht so viel als der Reiche."

⁵See above p. 163.

⁶"Dans l'impôt de la personne, la proportion injuste seroit celle qui suivroit exactement la proportion des biens . . . La taxe étoit juste, quoiqu'elle ne fût point proportionnelle; si elle ne suivoit pas la proportion des biens, elle suivoit la proportion des besoins. On jugea que chacun avoit un nécessaire physique égal; que ce nécessaire physique ne devoit point être taxé; que l'utile venoit ensuite, et qu'il devoit être taxé, mais moins que le superflu." Montesquieu, *De l'Esprit des Loix*, book xiii, chap. vii.

defends progressive taxation because the curtailment of luxuries involves less sacrifice than the curtailment of necessities. But he adds immediately: "It was thought that the size of the tax on the superfluous would prevent the superfluous."⁷ This would seem to imply the socio-political or socialistic theory of progressive taxation, that it is the duty of the state to remedy inequalities of wealth. Montesquieu must therefore be regarded as inconsistent, although in the main he may be classed under the division here discussed.

A similar charge of inconsistency can be brought against Graslin, the author of the most elaborate defense of the progressive principle in the eighteenth century. Graslin, as we have seen above,⁸ is an ardent defender of the benefit theory of taxation, but when he reaches the crucial point he adroitly slips in the faculty theory and attempts in a very remarkable way to interpret benefit in terms of faculty.

Taxes are indeed, says he, nothing but a return for protection. The rich man, however, presents so to speak, a greater surface to protection than the man in comfortable circumstances. Owing to his social position, his wealth and his enjoyments, he therefore really gets more of this kind of satisfaction of wants, for we must interpret the payments which one makes in exchange for protection in the light of the satisfactions which he gives up; and the rich man in paying a proportional tax has to retrench only in his extreme luxuries, while the other has to sacrifice objects of necessity rather than of comfort.⁹

⁷ "Que la grandeur de la taxe sur le superflu empêchoit le superflu."

⁸ Pp. 194-195.

⁹ "Le riche présente une plus grande surface à la protection que le citoyen aisé. Il prend plus en quelque façon de cet objet de besoin, par le rang qu'il tient dans la société, par ses possessions et ses jouis-

Confronted by the objection that this is not an exchange of value for equal value, Graslin states that the exchange must be interpreted in the light of a relation to individual wants. Exchange in general is the barter of a superfluity for a necessity, or of a superior want for an inferior want; but protection has a different value for different people, because its value varies according to the value of things given in return; and this value depends on the relation of wealth to wants. The greater the wealth the less is the value of what is given up by the taxpayer. Hence the general law of taxation is that the tax must grow progressively faster than the comfort of the taxpayer; if his comfort is doubled, the tax must be more than doubled.¹⁰ It will be seen, therefore, that Graslin

sances. S'ils donnaient, l'un et l'autre, un échange de la protection, des objets des mêmes besoins, il serait juste qu'ils donassent chacun une portion des ces objets, proportionnelle à celle qu'ils reçoivent dans l'objet total de la protection. Mais le riche, qui donnerait le dixième de son revenu, ne donnerait, c'est-à-dire, ne serait privé, que des objets des derniers besoins; au lieu que le citoyen simplement aisé, qui n' a que les objets de nécessité et d'utilité en donnant une dixième de la fortune, donnerait peut-être une moitié des objets d'utilité. Le dernier donnerait donc plus que le premier, en recevant moins. Graslin, *Essai analytique sur la Richesse et sur l'Impôt*, 1767, p. 285.

¹⁰ "L'échange considéré dans la rapport direct et absolu de chaque homme à ses divers besoins est un troc d'une chose superflue contre celle dont il a besoin, ou d'une chose qui, sans être superflue, est l'objet d'un besoin inférieur . . . Il n'en est pas de même de la protection, qui est un objet, de besoin incommunicable. . . . La protection, qui doit être achetée par deux hommes dont l'un est beaucoup plus riche que l'autre, a une valeur très différente pour chacun d'eux, parcequ'elle n'est qu'en raison du rang que tient le besoin de cet objet dans l'ordre particulier et respectif de leurs besoins; conséquemment, le riche, qui possède tous les objets de besoin supérieurs et inférieurs à celui de la protection, s'il donne la plus grande partie des objets inférieurs à celui-la, aura toujours fait un échange plus avantageux que l'homme qui, possédant très peu d'objets de besoin inférieurs à la protection, les donnerait tous en échange de cet objet de besoin." *Ibid.*, pp. 289-290. "La protection

really injects into his idea of benefit the conception of sacrifice, and that he is able to save the situation only by an interpretation of benefit which really abandons the entire contention. We should, therefore, scarcely be tempted to agree with those who assert that Graslin understood the subject better than any one else in the eighteenth century.¹¹

Montesquieu's views are accepted in part by Rousseau when he says that in levying taxes we must consider "le rapport des usages, c'est-à-dire, la distinction du nécessaire et du superflu. Celui qui n'a que le simple nécessaire ne doit rien payer du tout; la taxe de celui qui a du superflu peut aller au besoin jusqu'à la concurrence de tout ce qui excède son nécessaire."¹² Rousseau proceeds to demolish the argument that according to one's station in life, what is superfluous to one is necessary to another.¹³ Rousseau's chief defense of progressive taxation, however, rests as we have seen, on a quite different argument.¹⁴

Montesquieu's theory had a very wide influence on the thought of his time. His doctrine was accepted, for instance, by the Chevalier de Jancourt, the author of the article on taxation in Diderot's *Encyclopedia*. Jancourt

varie dans sa valeur relativement aux objets de besoin." Graslin, *op. cit.*, p. 291 . . . "La loi générale de l'impôt est qu'il doit augmenter dans une proportion toujours croissante de l'aisance du contribuable; c'est-à-dire qu'il doit être plus que double, si l'aisance est double." *Ibid.*, p. 305.

¹¹ "La progressivité, qu'il a mieux comprise et mieux exposée que personne au dix-huitième siècle. Lichtenberger, *Le Socialisme au Dix-huitième Siècle*, 1895, p. 320. Desmars recognizes the hiatus in Graslin's logic, which, however, he simply qualifies as "chose singulière." Desmars, *Un Précurseur d'Adam Smith*, etc., p. 134.

¹² Rousseau, *Discours sur l'Oeconomie Politique*, 1758, p. 60.

¹³ "C'est un mensonge: car un grand a deux jambes aussi qu'un bouvier, et n'a qu'un ventre non plus que lui." *Ibid.*, p. 60.

¹⁴ See above, pp. 192-194.

confesses that from the point of view of the benefit theory everyone secures the same advantages from government. Notwithstanding that fact, however, he demands progression in very much the same terms as Montesquieu.¹⁵ After quoting Montesquieu he proceeds:

"Such a tax which would impinge by steps of five, ten, thirty, fifty louis on the frivolous expenses of every family in easy circumstances, and which would cause a restriction of their expenses in proportion to the easiness of their circumstances, would suffice, together with current revenues, to defray all the expenditures of government, as well as the outlays for a just war, without the laborer's ever hearing anything about it except in the public prayers."¹⁶

Tifant de la Noue favors progression for much the same reason. "It is not enough," says he, "for the citizen to have the right of possession. He must also be protected in his right of enjoyment."¹⁷ The protection of the sovereign is due especially, in his opinion, "to those whose

¹⁵ "Cette tax est encore admissible pourvu qu'elle soit proportionnelle, et qu'elle charge dans une proportion plus forte les gens aisés en ne portant point du tout sur la dernière classe du peuple. Quoique tous les sujets jouissent également de la protection du gouvernement, de la sureté qu'il leur procure, l'inégalité de leurs fortunes et des avantages qu'ils en retirent, veut que les impositions, viennent pour parler ainsi en progression géométrique, deux, quatre, huit, seize, sur les aisés; car cet impôt ne doit pas s'étendre sur le nécessaire."—Jancourt, article "Impôt" in the *Encyclopédie*.

¹⁶ "Tel impôt qui retrancherait par an cinq, dix, trente, cinquante louis sur les dépenses frivoles de chaque famille aisée, et cette retranchement fait à proportion de l'aisance de cette famille, suffirait avec les revenus courans pour rembourser les charges de l'état ou pour les frais d'une juste guerre, sans que le laboureur en entendit parler que dans les prières publiques."

¹⁷ "Ce n'est point assez pour le citoyen d'avoir le droit de posséder; il faut encore qu'on le maintienne dans la liberté de jouir." Tifant de la Noue, *Réflexions philosophiques sur l'Impôt, où l'on discute les Principes des Économistes et où l'on indique un Plan de Perception Patriotique, accompagné des Notes*. 1775. See Lichtenberger, *Le Socialisme au XVIII siècle*. p. 322.

genius is their sole capital, and who have only this means of assuring their subsistence by the duties which they levy on the whims of the land owners and the capitalists.¹⁸ His practical proposals are summed up as follows: A progressive duty on articles of food, according as they are to be put in the category of necessities or of luxuries; a similar progressive duty on all other commodities; a progressive poll tax arranged in the same way; and a tax on that part of fixed property which is nothing but luxury or extreme wealth. "For," says Tiffant, "a tax on solid and fixed incomes appears to me to be the best kind of profits on which to impose the burden."¹⁹

As we approach the Revolution, we see Montesquieu's influence extend more widely. It is true, as we have learned above,²⁰ that most of the cahiers advocate proportional taxation. We find, however, the progressive principle proclaimed in two cases. In one of these it is stated that taxation according to faculty means that double comfort implies a double impost.²¹ In the other it is stated that taxation ought to be arranged not proportionally, but

¹⁸ "À ceux dont le génie est l'unique capital, qui n'ont que ce moyen pour assurer leur subsistance par les droits qu'ils prélèvent sur les fantaisies des possesseurs des terres et sur celles des capitalistes."

¹⁹ "Un droit progressif sur les denrées, en raison de leur proximité du besoin on du luxe; un droit dans une progression pareille sur tous les autres objets; une capitation progressive dans la même raison; un impôt sur la partie des immeubles qui n'est que luxe ou richesse décidée; une taxe sur les rentes solides et fixes me paraissent les profits les plus robustes sur lesquels puisse rouler l'impôt."

For a similar defense of progressive taxation in the works of Helvetius and Rabelleau, see Lichtenberger, *op. cit.*, pp. 264, 401.

²⁰ P. 207.

²¹ "L'impôt sur les personnes sera établi et reparti eu égard à leurs facultés de manière que celui qui a le double de l'aisance paie le triple des impositions des aisés de sa classe et ainsi de suite." Cahier du Tiers-Etat de Renne. See Gomel, *Histoire Financière de l'Assemblée Constituante*, 1896, i, p. 120.

according to the relative sacrifices that people are called upon to make.²²

Among the pamphleteers of the Revolution itself, the defenders of progressive taxation were more numerous. Perhaps the most prominent of these was Gosselin.²³ Gosselin is discussing the single tax of the "Economistes." He confesses that it might be a good thing to have equality in wealth; but in default of that we must at least tax the rich on their luxuries and expenses.²⁴ The practical method of accomplishing this is to divide the population into ten classes according to their wealth, and to tax the first class one-fiftieth, the second, one-fifty-fifth and so on *ad infinitum*.

Other upholders of the progressive principle on the same ground were Deverité and Du Fourney de Villiers. Deverité gives a sharp criticism of modern society, and paints in lurid colors the unhappy lot of the workman who is a "mulet des armées." He pays more taxes than the rich, and yet, taxes ought to be in an ascending, growing ratio to wealth, and should increase with the degree of

²² "La répartition (de l'impôt) doit être faite de manière que le pauvre paie peu, l'homme aisé d'avantage, et le riche beaucoup, non seulement sur une règle proportionnée, mais en raison combinée des sacrifices que chacun peut faire sans nuire à ses besoins." *Cahier du Baillage de Brian le Vigan*. See Lichtenberger, *Le Socialisme et la Révolution Française*, 1899, p. 26. Cf. Rouvière, *Histoire de la Révolution Française dans le Département du Gard*, 1887, i, p. 478. Also De Retz de Serviez, *op. cit.* p. 73.

²³ Gosselin, *Réflexions d'un Citoyen adressées aux Notables sur la Question proposées par un grand Roi (Frederic II): "En quoi consiste le bonheur des peuples et quels sont les moyens de le procurer" ou sur cette autre: D'où vient la misère, et quels sont les moyens d'y remédier?* Paris, 1787. Cf. Lichtenberger, *Le Socialisme Utopique*, 1898, pp. 150-151, and *Le Socialisme au XVIIIe Siècle*, 1895, pp. 434-440.

²⁴ "Ce serait bon si tous les biens se trouvaient également partagés. Il faut donc, en attendant, tâcher de faire tomber sur les

superfluity; for wealth augments indefinitely, at the expense of those that have little.²⁵

De Fourney de Villiers attacks the present distribution of wealth, and suggests a new method of classifying people according to their property. According to this distribution he thinks the poor of every order, far from paying, would have the right of abatement. Those who have only enough for the necessities of life would neither pay nor receive anything, since the real wants do not grow in proportion to one's superfluities. If the people in easy circumstances are held to pay one-twentieth, the rich ought to pay two and one-half fold, the opulent fivefold and those who are bursting with wealth, tenfold.²⁶ As this division is, however, impossible, he contents himself with the demand that the wealthy pay most of the taxes.

Progression is advocated also by Le Peletier de Saint-Fargeau,²⁷ and by Carnot²⁸ in his *Plan d'Education Nationale*, as well as by Noilliac, although for another reason.²⁹

riches la plus grande partie de l'impôt, ce qui ne peut avoir lieu qu'en imposant ce qui sert à leur luxe et leur consommation."

²⁵ "Les impôts devraient être en proportion géométrique ascendante avec les fortunes et croître avec les degrés du superflu." "L'opulence s'accroît indéfiniment aux dépens de ceux qui ont peu." Deverité. *La vie et les Doléances d'un pauvre Diable pour servir de ce qu'on voudra aux prochains États—Généraux*, 1789. Cf. Lichtenberger, *Le Socialisme et la Révolution Française*, p. 38.

²⁶ "Selon cette distribution les pauvres de tout ordre, loin de payer, auraient droit à des soulagements. Ceux qui n'ont que le nécessaire ne paieraient ni ne recevraient, et comme les besoins réels ne croissent point en raison du superflu si les gens aisés devaient payer un vingtième, les riches en devraient payer deux et demi, les opulent cinq, les regorgeants dix." Du Fourney de Villiers, *Cahier du Quatrième Ordre*, 1789. Quoted in Lichtenberger, *op. cit.*, p. 39.

²⁷ Lichtenberger, *op. cit.*, p. 197.

²⁸ *Correspondence générale de Carnot*, published by E. Charavay, 1892, i, p. 187; quoted in Lichtenberger, *op. cit.* p. 126.

²⁹ See above, p. 197, Lichtenberger, *Le Socialisme au XVIIIe Siècle*,

Montesquieu's ideas spread also to Germany, where we find several writers at least positing the question of progressive taxation, even if they did not defend it. Thus Justi cites the statement of Montesquieu as to the Athenian progressive tax, and after comparing the progressive scale with the then usual practice, adds, "Ich überlasse den Lesern zu urtheilen welche Grundsätze am richtigsten sind."⁸⁰ So, also, Scheidemantel quotes Montesquieu approvingly,⁸¹ and Struensee advances the same idea. Proportional taxation, he tells us, does not impose the same burden, for if we take away 30 units from A, who has 300 units of income, and if we take away 300 from B who has 3,000 units of income, we impose a very unequal sacrifice on them. The one has not enough to eat, and the other perhaps gives up a few pleasure trips. Where is the justice in this?⁸²

p. 322, note 3 quotes another earlier pamphlet in defense of the progressive principle: *Mémoire sur une nouvelle Imposition établissant que l'Impôt doit tomber sur le superflu et non sur le Nécessaire absolu.*"

⁸⁰ Justi, *Staatswirthschaft*, 1755, pp. 5-6.

⁸¹ "Athen beurtheilte die Auflagen nach geometrischen Verhältnissen, andere Nationen haben das arithmetische Mass vorgezogen: ich würde zwar den Gebrauch der Athenienser für besser halten—ein Reicher kann weit leichter dreissig von Hundert als der Dürftige, fünf vom Hundert entbehren." Justi, *Staatsrecht nach der Vernunft*, 1770, pp. 2267."

⁸² "Wo bleibit nun die Gerechtigkeit? Jener kann sich nicht mehr satt essen, dieser stellt vielleicht jährlich ein paar Lustreisen ein." K. A. V. Struensee, "Ueber die Mittel eines Staats bei ausserordentlichen Bedürfnissen, und besonders in Kriegszeiten, Geld zu erhalten." In *Abhandlungen über wichtige Gegenstände der Staatswissenschaft*. 1800. Pp. 212-13.

B. *The Nineteenth Century.*

French Writers.

Very much the same ideas were developed in the nineteenth century. Among the earliest of the French writers was the economist, Montyon. Montyon holds that not only must the sum necessary to existence be exempt, but the revenue which is devoted to the satisfaction of wants not far removed from necessities, must be very lightly taxed; while fortunes whose product exceeds what is necessary both for necessities and for comforts belong in far greater part to the state.¹ Montyon pleads in especial for a diminution of the rate in favor of fathers of large families.

The most celebrated French advocate of progressive taxation in the nineteenth century, however, is J. B. Say. Say maintains that taxation is a sacrifice made to public order; but public order cannot demand the sacrifice of whole families. Hence, the minimum of subsistence must be spared. When we go beyond that, Say confesses that uncertainty begins. The line that separates superfluities from necessities is not fixed, but relative. "All that we know is that after a certain point there is in every income an imperceptible progression, so that a family can satisfy ever less necessary wants, until the wants become almost

¹ "Non seulement l'impôt personnel ne doit point morceler ce qui est absolument nécessaire à la subsistance du contribuable; mais par une suite de ce principe, il doit être gradué dans une telle proportion de la fortune, qu'un revenu qui ne fournit que quelques douceurs d'existence si proches des besoins qu'elles peuvent se confondre avec eux, et que, sans elles, l'existence serait un mal plutôt qu'un bien, ne soit grevé que d'un impôt très léger, si toutefois il en doit supporter aucun; un revenu qui confère une plus grande aisance doit être plus fortement imposé; et dans une grande fortune, les produits qui excèdent ce qu'exigent les besoins et l'aisance, peuvent en très grande partie être consacrés aux besoins de l'Etat." Mon-

unfelt."² Say gives the classic example of two families with 300,000 and 300 francs income respectively. A proportional tax of ten per cent would leave the one family 270,000 income, which would scarcely affect the satisfaction of its wants at all; but it would leave the other family only 270 francs, and thus rob it of the necessary means of existence. "A tax which is simply proportional to income would hence be far from just. I shall go further and shall not hesitate to say that the progressive tax is the only just tax."³ In another work, after stating that the protective theory logically leads to proportional taxation, he asks: "Is not a simple proportional tax heavier for the poor than for the rich? Ought the man who earns only enough to feed his family to be taxed in exactly the same proportion as the man who, because of his ability, his original capital or his landed property, earns enough not only to defray all the expenses of a luxurious life, but who, in addition, yearly adds to his capital? Do you not find in this demand something that shocks your feeling of jus-

tyon, *Quelle Influence ont les diverses Espèces d'Impôts sur la Moralité, l'Activité et l'Industrie des Peuples*, 1808. In *Mélanges d'Economie Politique* (Guillaumin's *Collection des principaux Economistes*) ii (1848), p. 391.

² "Tout ce qu'on sait, c'est que les revenus d'un homme ou d'une famille peuvent être modiques au point de ne pas suffire à leur existence, et que depuis ce point jusqu'à celui où ils peuvent satisfaire à toutes les sensualités de la vie, à toutes les jouissances du luxe et de la vanité, il y a dans les revenus une progression imperceptible, et telle qu'à chaque degré, une famille peut se procurer une satisfaction toujours un peu moins nécessaire, jusqu'aux plus futile qu'on puisse imaginer; tellement que si l'on voulait asseoir l'impôt de chaque famille, de manière qu'il fût d'autant plus léger qu'il portât sur un revenu plus nécessaire, il faudrait qu'il diminuât, non pas simplement proportionnellement mais progressivement." J. B. Say, *Traité d'Economie Politique*, 1803, book iii, chap. ix; 8th ed., 1876, p. 548.

³ "On voit donc qu'un impôt qui serait simplement proportionnel au revenu serait loin cependant d'être équitable . . . J'irai plus loin, et je ne craindrai pas de prononcer que l'impôt progressif est le seul équitable." *Ibid.*, p. 549.

tice?"⁴ In other words, Say bases his demand for progressive taxation on the theory of sacrifice.

Since Say, but few French writers have until very recently advocated progression. Those that have done so have, however, generally been overlooked. Let us take them up in their historical order.

Esmenard du Mazet defends progressive taxation on the express ground that every citizen must make an equal sacrifice, that is, a sacrifice which will make them all equally feel the privation imposed upon them by the tax. "The possessor of 20,000 francs income who is taxed 2,000 francs, is less affected by the tax than he who with 1,000 francs pays 100. Otherwise we would have to admit that all our wants were equally urgent.⁵ More recently the Belgian economist Denis has taken a similar position, although he maintains that the contest between the principles of proportion and progression is interminable as long as there exists an inequality in wealth.⁶

The most subtle attempt to prove that the sacrifice theory leads to progressive taxation was made by Fauveau, who applies the mathematical method. Fauveau, we remember, maintained that even from the standpoint of benefits taxation must be progressive.⁷ But the equality-of-sacrifice theory, in his opinion, leads to the same result.

⁴ J. B. Say, *Cours Complet d'Économie Politique Pratique*, 1829, part viii, chap. iv; Brussels ed. (1844), p. 495.

⁵ "Tous les citoyens doivent faire, dans l'intérêt de la chose publique un sacrifice égal, c'est à dire qui leur fasse également sentir la privation que ce devoir impose . . . Ainsi donc, et le sentiment intérieur et l'expérience sont d'accord pour nous faire adopter dans le répartition de l'impôt une autre base que la simple proportion de la fortune." Camille Esmenard du Mazet, *Nouveaux Principes d'Économie Politique*, 1849, ii, p. 283.

⁶ "Je considère l'opposition des deux tendances comme indéfectible aussi longtemps que subsistera l'inégalité des richesses." H. Denis, *L'Impôt*, 1889, pp. 89-91.

⁷ Above, p. 202.

The moral sacrifice imposed on individuals by taxation, does not depend alone, he thinks, on the amount of money taken. The loss of the same sum of money is far more burdensome to the poor than to the rich, because in the first case it trenches on necessities, in the second on superfluities. Hence the moral value of a man's fortune does not increase as fast as its mathematical value.⁸ The moral value of a given amount of property may be considered a function of its mathematical value, a function which increases less rapidly than the variable. The moral sacrifice, hence, is the difference between the moral value of a man's fortune before the payment of the tax and after its payment. Great mathematicians like Laplace and Poisson have shown that the moral increase of wealth may be deemed proportional to its mathematical increase and inversely as the total value of the fortune, whenever this increase is infinitely small. Hence taxation based on equality of sacrifice must be progressive, although the rate of progression must be less than in the case of taxation looked upon as an insurance premium.⁹

⁸ "La perte d'une même somme d'argent est beaucoup plus pénible pour le pauvre que pour le riche, parcequ'au premier c'est le nécessaire, au second c'est superflu qui se trouve enlevé. On comprendra aisément qu'en conséquence de cette vérité la fortune d'un homme n'a pas pour lui une valeur morale qui croisse aussi vite que sa valeur mathématique, tout accroissement de bien égal diminuant de valeur alors qu'il rapporte des choses de moins en moins nécessaires." Fauveau, *Considérations Mathématiques sur la Théorie de l'Impôt*, 1864, p. 33.

⁹ "On peut donc considérer la valeur du bien d'un individu comme une fonction de la valeur mathématique de ce bien, fonction qui croît moins rapidement que la variable . . . Le sacrifice moral imposé à chacun c'est la différence de la valeur de la fortune de l'individu avant le paiement de l'impôt et après . . . L'accroissement moral de la fortune peut être considéré comme proportionnel à son accroissement mathématique et en raison inverse de la valeur totale de la fortune, toutes les fois que cet accroissement est infiniment petit . . . A ce point de vue l'impôt doit être progressif." *Ibid.*, pp. 35 and 41.

The exact rate is expressed by Fauveau after several pages, filled with operations in differential calculus, in a formula two lines long, which it is not necessary to reproduce here.

C. *The English Writers.*

The English writers have hitherto been almost entirely neglected by the historians of public finance. The earliest advocacy of progression resting on faculty, is to be found in the writings of a celebrated divine, Dr. Paley. He lays down his views in the following words: "A tax, to be just, ought to be accurately proportioned to the circumstances (or more correctly perhaps to the amount of the property) of the persons who pay it. But upon what, it might be asked, is this opinion founded, unless it could be shown that such a proportion interferes the least with the general conveniency of subsistence? Whereas, I should rather believe, that a tax constructed with a view to that conveniency, ought to rise upon the different classes of the community *in a much higher ratio* than the simple proportion of their incomes. The point to be regarded is not what men *have*, but what they can *spare*; and it is evident that a man who possesses £1,000 a year can more easily give up £100 than a man with £100 can part with £10; that is, those habits of life which are reasonable and innocent, and upon the ability to continue which the formation of families depends, will be much less affected by the one deduction than by the other. It is still more evident that a man of £100 a year would not be so much distressed in his subsistence by a demand from him of £10, as a man of £10 a year would be by the loss of £1."¹ Paley then goes on to discuss whether "the simple, the duplicate, or any higher or immediate proportion of men's incomes," is the real ideal.

The same idea is also worked out by the English so-

¹ Paley, *Elements of Political Knowledge*, chap. xi, sec. iv, "Taxation." In his collected works, ed. 1830, iii, p. 511.

cialistic physician, Charles Hall, at the beginning of the nineteenth century. The present method of taxation, according to Hall, is not justly proportioned.² "We have observed," says he, "that the present mode is—if a person of one hundred pounds a year pays ten pounds, a man of one thousand pays one hundred pounds a year. In this case the former gives up something highly useful if not necessary to his family, whilst the latter gives up nothing but what is in a much less degree useful, and bordering on such as are superfluous. What a man of ten thousand a year gives up is in a still less degree useful, and approaching still nearer to what is superfluous. It would be desirable that the part each rich man should pay toward the taxes should be regulated by some gradually increasing series; to increase, for instance, as the squares of the income of each person, or in some arithmetical or geometrical proportion; this would entirely prevent any arbitrary and partial assumptions, as is the case at present, where it is evidently in favor of the rich, and that in a greater ratio as they are more rich." Hall proceeds to point out that such a tax would really be no grievance, but would, on the contrary, bring a far greater equality.

A fuller exposition of the doctrine is contained in the work of Craig, who is the first English writer to devote a separate volume to problems of public finance. Although Craig sometimes uses language that seems to imply the give-and-take theory, his defense of progression is based primarily on the equality-of-sacrifice doctrine. Thus he says: "The taxes which each inhabitant pays to the state consist of the quantity of enjoyment of which he is deprived. . . . It seems reasonable that the portion

² Charles Hall, *The Effects of Civilisation on the people in European States*, 1807. The above quotations are made from the 2nd edition, 1813, pp. 206 *et seq.*

of enjoyments so yielded by individuals should correspond to that which they respectively retain."³ Craig divides all enjoyments into three classes: necessities, gratifications and superfluities. After a lengthy examination of the privations occasioned to individuals by the diminution of each of these various classes, he concludes that "taxes, if proportioned to wealth, occasion more severe privations to the poor than to the rich," and that "the proportion of the public burdens laid on each individual ought to increase in a quick progression, according to his wealth."⁴ Craig also attempts to prove that the state is compelled to assume certain expenditures directly traceable to the demands of the wealthy, and that hence the "pre-eminently wealthy" ought to pay more than in proportion to their wealth. This, however, is plainly the give-and-take theory, and therefore open to some question; and Craig is in the main content to base his demands for progression on the theory of privation of enjoyments of equality of sacrifice. Later on, he applies the theory of "sacrifice of enjoyments" not only to what he calls the principle of "gradation" of the tax,⁵ but also to what is generally known as the principle of differentiation, making a distinction in the rate according to the source whence the income is derived. Proportional taxation on all income would be grossly unequal. The inequality, he thinks, may be mitigated, not only by progressive taxation, but "by making the rate depend partly on property and partly on income," *i. e.*, by capitalizing

³ John Craig, *Elements of Political Science*, 1814, ii, p. 264.

⁴ *Ibid.*, ii, pp. 270, 279.

⁵ In discussing the first maxim of Adam Smith, he introduces the "important modification" by the assertion "that according to justice as well as expediency, the proportion which the taxes bear to the property of each contributor ought to increase progressively according to the wealth." *Ibid.*, iii, p. 5.

the income.⁶ Craig, however, sees that even these arrangements would not bring about a complete equality of sacrifice. "Sources of inequality would still remain in the state of health of the contributor, in the probability of his employment being permanent, and in the various risks to which commercial speculations are necessarily, though very unequally, exposed."

Buchanan, the acute commentator of Adam Smith, was also in favor of progressive taxation, and for very much the same reason. He tells us: "The injustice of fixing a common rate of contribution for all incomes, however various, is sufficiently obvious; since an income of £10,000 per annum might pay, without any hardship, a proportion which, if exacted from a smaller income, would force a retrenchment, not of comforts merely, but of absolute necessities. The rate of contribution to be equitable ought therefore to vary, gradually ascending, until it rises to its maximum among the highest incomes."⁷

The most comprehensive, and in fact the only elaborate work in English, devoted specifically to the income tax, is that of Sayer.⁸ Sayer takes it for granted that income is the best test of ability. "Considering equality of taxation to signify taxation in due proportion to every one's means and ability to pay, that most just principle of tax-

⁶ "All revenue derived from annuities or professions might be brought to a capital, according to the number of years at which the life of the annuitant was valued, and the tax might then be levied on this fictitious property." Craig, *op. cit.*, iii, p. 23.

⁷ David Buchanan, *Observations on the Subjects treated of in Dr. Smith's Inquiry into the Nature and Causes of the Wealth of Nations*, 1817, p. 211.

⁸ *An Attempt to show the Justice and Expediency of substituting an Income or Property Tax for the present Taxes or a Part of them, as Affording the most Equitable, the least Injurious, and the least Obnoxious Mode of Taxation*, 1833. It was published anonymously but was written by Benjamin Sayer. Cf. McCulloch, *Literature of Political Economy*, 1845, p. 339.

ation, it seems to follow that income, which constitutes and evidences the means to pay, is the surest basis for equal taxation." Sayer maintains that income is far superior to expenditure as a basis of taxation, because a tax on income "admits practically of a gradation" or "gradually increasing scale of taxation, according to which the rate of it will become higher as the means for the contribution increase."⁹ Another advantage of the income tax is that it admits of a proportionate reduction to persons having large families, "on the principle that taxation should be exacted in proportion to every one's ability to bear it, and as a man with a family to maintain is less liable to bear taxation than a man without a family."¹⁰ Sayer defends the general theory of "the graduated scale of charge" for the reason "that the deduction which it makes from inferior incomes occasions a deprivation of the necessities of life, while the deduction from large incomes deprives of luxuries only, or of such conveniences or enjoyments as can be spared without so much personal distress and suffering as the want of absolute necessities occasions."¹¹ He discusses some objections made to the principle, and although confessing that there are certain doubts as to the practicability of carrying out the entire system of graduation, he nevertheless upholds progressive taxation as in the main just and expedient. Sayer's whole discussion is noteworthy.

Several years later, at the time that the principles of the English income tax were actively discussed, progressive taxation was again demanded. Buckingham based his contention on the clause of Adam Smith that people should pay in proportion to their respective abilities. "So

⁹ Sayer, *op. cit.*, pp. 3, 4.

¹⁰ *Ibid.*, pp. 28, 248.

¹¹ *Ibid.*, p. 219.

long as a man with an income of £300,000 a year must be more able to pay thirty per cent of income tax than a man of £50 a year to pay five per cent, so long must the graduated scale be considered more just than a uniform one for all classes."¹² Later on he explains that "the very wealthiest who paid the heaviest amount and the largest proportion of their incomes would after all be least inconvenienced by such payment, since it is not so much the amount that is contributed by them, as the surplus amount of fortune or income still left in their possession, which affects their happiness."¹³

Among recent writers Sidgwick devotes some slight attention to the problem. He admits that the benefit principle, or the fee principle as he calls it, can be applied to taxation only in part if at all.¹⁴ The problem hence arises as to what is "the fundamental principle for the distribution of the burden of taxation in the narrower sense—that is, of the burden that remains to be allotted when the principle of payment in proportion to service received has been applied as far as reasonable." The answer in Sidgwick's words is that "the obviously equitable principle—assuming that the existing distribution of wealth is accepted as just, or not unjust—is that equal sacrifice should be imposed on all, except so far as it is thought desirable to make taxation a means of redressing the inequalities of income that would exist apart from governmental interference."¹⁵ Sidgwick regrets this exception, limiting it, however, by the one proviso that the

¹² James S. Buckingham, *National Evils and Practical Remedies*, 1849, p. 351. Cf. also the *Financial Reform Tracts*, 1850, no. 27, p. 6. The subject is fully discussed from the same standpoint in another work by Buckingham, *Plan of an Improved Income Tax*, 1845, pp. 13-25.

¹³ *Ibid.*, p. 370.

¹⁴ H. Sidgwick, *Principles of Political Economy*, 1883, p. 555.

¹⁵ *Ibid.*, p. 562.

community has to protect its members from starvation. The consequence of this is the exemption of the minimum of subsistence. "No one's income ought to be reduced by taxation below what is required to furnish him with the bare necessities of life." Sidgwick is tempted to go still further, and asks "whether in order to equalize the real burdens of taxation one ought not to lay a progressively increasing tax on the luxurious expenditures of the rich?" "I must admit," says he, that in my opinion such a tax would be justifiable from the point of distribution alone."¹⁶ But he adds that "it is open to the practical objection that the progression, if once admitted, would be very difficult to limit, owing to the impossibility of establishing any definite quantitative comparison between the pecuniary sacrifices of the rich and those of the poor, with a resulting danger that it would be carried too far and drive capital away," thus causing a loss to production which would more than outweigh the gain in equality of sacrifice.¹⁷ Sidgwick is therefore led to prefer the scheme of simply exempting savings from taxation.

¹⁶ Sidgwick, *op. cit.*, p. 563.

¹⁷ *Ibid.*, p. 564.

D. *The German Writers.*

We come next to the German economists, among whom we find a far larger number of adherents of progressive taxation. The first of the Germans to demand progression as the outcome of the faculty theory was Schön. He breaks completely with the give-and-take theory, and asserts that taxes should be in accordance with ability.¹ A proportional tax would, in his judgment, really create economic inequality. It must be said, however, that Schön also partly advocates the socialistic theory in so far as he says that in democracies the cardinal point is to prevent great inequalities of wealth, and that progressive taxation is a far better engine for accomplishing this result than the drastic measures of a Lycurgus. He naively maintains, however, that in aristocracies and monarchies, on the other hand, inequality of wealth is unavoidable, but that progressive taxation is nevertheless to be demanded as the most equitable system, although the rate of progression must be different.² In democracies he proposes that the rate should increase arithmetically with every arithmetical increase in the income; in aristocracies and monarchies the rate should increase with every doubling of the income.³

Just before and during the revolution of 1848 we find the demand again coming to the front. Schmitthenner

¹ "Fähigkeit" is the word he uses. Johannes Schön, *Die Grundsätze der Finanz*, 1832, chap. 5, esp. p. 61.

² *Ibid.*, pp. 58-60.

³ "Es darf (in Demokratien) nur die Abgabe im arithmetischen Verhältnisse steigen, wenn die Einkünfte im arithmetischen Verhältnisse wachsen; im Monarchien und Aristokratien müsste der Steuerfuss bloß dann in arithmetischen Verhältnisse wachsen, wenn das Einkommen eine Verdoppelung erlanget." *Ibid.*, p. 60.

regards progression as a conclusion from the principle of economy by which he thinks we must understand not a commutative or absolute, but a distributive or relative equality.⁴ In the national assembly Freiherr von Gross suggested an income tax with progressive rates up to thirty-three and one-third per cent;⁵ and Baumstark demands that the rate should rise in a well defined progression which the legislature must apportion to the respective conditions of the taxpayers, as the amount of their income progressively rises.⁶

After the revolution of 1848 progressive taxation was not again advocated for several decades in Germany, although, as we have seen, the demand is frequently found in England. Recently this relation has been reversed. The English writers have not favored progression, but the Germans have done so. Let us consider, then, the chief German advocates of progression during the last generation.

The eminent economist, Held, lays the chief stress on equality of sacrifice. If we accept equality of sacrifice as a principle, proportional taxation is, in his opinion, absolutely illogical. Held maintains that the principle of equality cannot possibly lead to any arithmetical relation between income and pressure of taxation as the only equitable principle. This is all the more true because income

⁴ "Gleichheit unter der jedoch nicht eine kommutative oder absolute, sondern eine distributive oder relative gemeint sein kann, so dass also die Quote nicht für alle Personen und Steuerobjekte gleich, sondern sich nach der Leistungsfähigkeit richtet."—Schmittthener, *Grundlinien des allgemeinen oder idealen Staatsrechts*, 1845, pp. 357-8.

⁵ Freiherr von Gross, *Allgemeine progressive Grund- und Einkommensteuer, Gleiches Maas und Gewicht für Deutschland*. 1848.

⁶ That the rate "in angemessener Progression, welche der Gesetzgeber den Verhältnissen anpassen muss, steigen sollte, sowie der Betrag des Einkommens in gewisser Progression steigt." E. Baumstark, *Zur Einkommensteuerfrage*. 1850.

itself does not seem a practicable standard by which to measure individual sacrifice. Income may, indeed, afford us a measure for the relative individual power to dispose of economic values; but he who disposes of equal values is not able, on that account, either to enjoy equally or to suffer privation equally.⁷ Income, in other words, is no completely valid test of justice in taxation. Held concludes that proportional taxation is illogical, and that it is useless to endeavor to realize equality of sacrifice. The best taxes are those which lead to the least complaints.⁸ Yet, later on, in constructing his positive system, he includes, as one of his fundamental demands, a progressive income tax.⁹

The most noted of the German defenders of progressive taxation is Neumann. Neumann thinks that the principle of faculty is in reality not different from that of equal sacrifice. Were the ability to pay taxes an absolutely fixed quantity, like measure and weight, then, indeed, it might be asked: What has faculty to do with sacrifice? But, in reality, faculty is not something definitely fixed. When anyone has to fulfill a duty, whether to father or to fatherland, his ability to do so generally increases in proportion as he imposes efforts on himself; and, furthermore, it generally increases in proportion as he denies himself pleasures, enjoyments and the satisfaction of wants. In both cases, thus, the ability grows with the sacrifice—the sacrifice of the effort and the sacrifice of the denial. Sacrifice and faculty in this sense hence are not different things, but stand in the closest

⁷ "Das tauschwerthe Einkommen des Einzelnen giebt uns ein Maas für die vergleichsweise Macht der Einzelnen, über ökonomische Werthe zu verfügen—aber wer über gleiche Werthe verfügt, kann desshalb nicht immer gleich Viel geniessen und gleich Viel entbehren." Held, *Die Einkommensteuer*, 1872, p. 113.

⁸ *Ibid.*, p. 115.

⁹ *Ibid.*, p. 189.

ach other. In fact, it may be said that only recognition of the sacrifice imposed can the ability attain a definite form, and thus be of purposes of taxation.¹⁰ It might be claimed, if two persons, with equal efforts, annually and \$10,000 respectively, their ability to as one to ten. This, however, is not true, state is not the only one to take advantage ty. The state must, so to speak, divide the ability with his family. The state must look ces which the taxpayer is compelled to make. The state cannot take cognizance of all the in- nents of each man's condition; this would be ble as it is impossible. The state has to deal e average men, average needs and average

The principle therefore must be to appor- such a manner as to correspond to the ability

Leistungsfähigkeit—oder richtiger gesagt die Fähig- nter Pflichterfüllung beizutragen—bei A, B, C, u. s. ehende Grösse, wie Maas und Gewicht bestimmter o hätte jene Annahme recht. Was hätte den jene dem Opfer zu thun, das die Leistung auferlegt?! In ene Fähigkeit aber etwas Feststehendes *nicht*. Wer seiner Pflicht zu leisten hat, gelte es dem Vater oder le—dessen Befähigung hiezu wächst in Allgemeinen, sich Arbeitsmühen auferlegt, und sie wächst eben- reinen, je nachdem er sich Genüsse, Freuden und die von Bedürfnissen versagt. In beiden Beziehungen ich die Befähigung mit dem gebrachten Opfer, dem he und dem der Entsagung. Und Opfer und Leis- in dem hier in Rede stehenden Sinne sind also nicht e, sondern stehen in inniger Beziehung zu einander." n, *Die progressive Einkommensteuer in Staats- und ialt*," 1874, p. 62.

können freilich immer nur Durchschnittsmenschen, edürfnisse, Durchschnittsgefühle und Durchschnitts- in Anschlag gebracht werden." *Op. cit.*, 1874, p. 63.

to contribute to public purposes with generally equal efforts and equal sacrifices as over against other needs.¹²

Neumann objects to the phrase equality (*Gleichmässigkeit*) of taxation as in itself affording no clue. If individuals are taxed according to the number of their teeth or the length of their eyebrows, or their weight, we have, in one sense, an equality of taxation. What is it that should be equal? asks Neumann. What is the test or norm of equality? Some assume to find it in the mere fact of income, so that everyone will be left in the same relative position as before. They hence draw the conclusion that proportional taxation of income is the only equal method. Neumann, however, objects that this is no principle of taxation, just as little as is the opposite idea that it is the function of the state to alter conditions of wealth. Secondly, he holds that even if we accept the principle, proportional taxation of income does not necessarily ensue. For in actual life the same percentage of income tax may affect different individuals very differently, according as their whole economic condition changes.¹³

The logical conclusion from the principles of faculty and equality of sacrifice seems to Neumann to be progressive taxation. We do not tax individuals according to their faculty, if we tax A, with ten times as much income as B, only ten times as much. For, after satisfying his necessary wants, A still has not only ten times as much left with which to discharge his duty toward the state, but far more than ten times as much. His faculty is greater.

¹² "Nach Massgabe der Leistungs-, oder genauer gesagt, der Steuerkraft, d. h. so zu vertheilen, wie es der Befähigung zur Leistung in Staat und Gemeinde bei etwa gleicher Anstrengung und etwa gleichen Opfern andern Bedürfnissen gegenüber entspricht." Neumann, *op. cit.*, p. 63.

¹³ *Ibid.*, pp. 98-102.

In the same way, it is undeniable that a tax of \$15 is far harder to bear for a man with \$300 income, than a tax of \$1,500 for a man with \$30,000 income. The sacrifice is greater. As the rate of the tax becomes higher, the difference in the sacrifice is still more apparent. Thus, from the standpoint both of faculty and of sacrifice, equality of taxation means progressive taxation.¹⁴

One of the chief objections to progressive taxation is that as the progression increases the tax must finally, confiscate a man's entire income. Such a view, however, overlooks the fact, says Neumann, that the progression is not to affect higher incomes as such, but only the surplus incomes; since it is only these surplus amounts which generally subserve the less urgent wants. Moreover, there is a limit beyond which it is not true that equal amounts of high incomes subserve equally pressing wants. When we reach very high incomes they generally satisfy wants which are of equally little urgency, or which can be equally well dispensed with. In other words, beyond a certain point the tax must become proportional. The rate of progression thus must itself be degressive, ultimately to arrive at proportional taxation. The ideal must be a degressively progressive tax.¹⁵

While most of the minor German writers have followed Neumann's reasoning, the authors of two widely read textbooks on finance, Schäffle and Stein, rather ignore the theory of equality of sacrifice.

Schäffle maintains that the state should levy its taxes according to "the actual capacity to pay."¹⁶ Property

¹⁴ Neumann, *op. cit.*, p. 142.

¹⁵ *Ibid.*, p. 146.

¹⁶ "Der Staat soll alle Steuerkräfte nach Verhältniss der wirklichen Leistungsfähigkeit belasten." A. E. F. Schäffle, *Die Grundsätze der Steuerpolitik*, 1880, p. 75. Schäffle sums up his argument with but slight modifications in a latter work, *Die Steuern, Allgemeiner*

and income represent only the average capacity, and therefore, thinks Schäffle, it is necessary to supplement direct by indirect taxation in order to ascertain the actual, "individual, concrete, momentary" capacity.¹⁷ In so far, however, as the average capacity is concerned—that which is measured by property or income—the rate cannot be proportional. For taxable capacity is very different in the higher strata of property and income than in the lower strata. Large property or large income possesses immeasurably more capacity to bear taxes when taken in connection with ordinary needs, but especially so in the case of extraordinary needs. Hence the justice and equity of progressive taxation. But we cannot imagine, says Schäffle, that the progressive rate should ever reach one hundred per cent. In the actual structure of society large fortunes and incomes have important functions to fulfill, such as the duty of conducting large business enterprises, the collection of capital, the employment of the fine arts, and the satisfaction of the extraordinary needs of an advanced civilization. Hence a limitless progression would involve a crippling of necessary social services.¹⁸

Schäffle's theory depends upon his interpretation of "taxable capacity" or faculty. "Actual capacity," says he, is "the expression of the amount which the taxable economic unit can abandon to the relative support of the

Theil, 1895, p. 218 *et seq.* The following quotations are from his earlier and more authoritative work.

"Die wirkliche—individuelle, konkrete, momentane—Leistungsfähigkeit" as over against "die Durchschnittssteuerkraft."

"Die Steuerkraft verhält sich einmal in den Höhenlagen der sozialen Vermögens- und Einkommensschichten anders als in den Tiefenlagen. Grosses Vermögen, grosses Einkommen ist dem ordentlichen, namentlich aber dem ausserordentlichen Bedarfsfalle gegenüber schon in Durchschnitt ungleich steuerkräftiger." Schäffle, *Die Grundsätze der Steuerpolitik*, 1880, p. 78.

state, without crippling his own relative support."¹⁹ Or, as he puts it in another place, "the fundamental principle of public finance is the economically relative support of the State wants as over against a not less relative support of all non-state wants."²⁰ There are individual and collective wants, private and public wants; and a truly economic method of dealing with the question must not subordinate the one set to the other. Schäffle unconsciously uses very much the same language as did Montesquieu more than a century earlier.²¹

It may be said in criticism of Schäffle that the reasons which he advances in defense of large fortunes are, in themselves, not very strong, and that his definition of faculty is not sufficiently precise. It does not afford any real test for determining how and to what extent we can measure the "crippling of one's relative support." So far as it has any meaning at all, it implies the consumption or sacrifice theory which Schäffle is so careful to avoid. The stress is really put upon consumption, not upon production. The theory thus finally resolves itself into an acceptance of the sacrifice doctrine.

Stein, on the other hand, who upholds progressive taxation only in the later editions of his work, has not only nothing to say about equality of sacrifice, but regards faculty (*Steuerkraft*) exclusively from the standpoint of

¹⁹ "Die wirkliche Leistungsfähigkeit ist eben der Ausdruck dafür, wie viel die steuerpflichtige Privatwirthschaft zu der im Budgetabschied bestimmten verhältnissmässigen Alimentation des Staates ablassen kann, ohne die verhältnissmässige Eigenversorgung zu vernachlässigen." Schäffle, *op. cit.*, p. 23.

²⁰ "Oberstes Princip der Finanzwissenschaft ist die volkswirthschaftlich verhältnissmässige Deckung des Staatsbedarfes gegenüber einer nicht minder verhältnissmässigen Deckung aller nichtstaatlichen Bedarfe." *Ibid.*, p. 17.

²¹ The words of Montesquieu are: "Pour bien fixer ces revenus, il faut avoir égard et aux nécessités de l'état et aux nécessités des citoyens." *L'Esprit des Loix*, xiii, p. 7.

production. With every accumulation of capital the capacity to form new capital increases, while the wants of the owner do not increase with its amount.²² This he calls the "law of capital growth."²³ He explains this more closely, however, as meaning that the capital-building qualities vary really only with the periodical surpluses. A definite percentage of small capital possesses relatively more power to generate further capital than an equal percentage of large capital. A millionaire, he thinks, can never secure as much revenue out of each fraction of capital as a small trader. His percentage of profit is smaller. But the frequent reduplication of the smaller percentage finally makes the surplus larger than the less frequent reduplication of the higher percentage. Hence it is the surplus or the income, not the capital, which ought to be taxed progressively. Moreover, the rate of progression ought itself to decrease with the income.²⁴ The point to be noted is that progressive taxation in Stein's judgment follows necessarily from the idea of production.

Professor Wagner, as we know, bases his demand for progressive taxation on what he calls the socio-political principle. Nevertheless he regards this principle as an outcome of the faculty theory, as explained by the sacrifice theory. Faculty he conceives as depending on two sets of conditions, those which respect the acquisition

²² "Wohl ist es aber gewiss, das bei jedem Kapital die Kraft seiner Kapitalbildung mit seiner Grösse wächst . . . während das Bedürfniss seines Besitzers nicht in gleichem Grade grösser wird." Stein, *Lehrbuch der Finanzwissenschaft*, (4th ed, 1878), p. 421.

²³ "Grössengesetz der Kapitalien."

²⁴ "Der wahre progressive Steuerfuss soll auf der Zahl der Einkommenseinheiten beruhen, aber darf niemals als eine rein geometrische, sondern nur als eine mit jener Zahl selbst abnehmender Progression auftreten." *Op. cit.*, i, p. 451. Cf. 5th ed. (1885), ii, p. 432.

and possession of commodities, and those which respect the use to which these commodities are put in satisfying our own wants as well as those of others whom we are bound to look after.²⁵ In both cases the faculty stands in the closest relation with the pressure of the tax, or the sacrifice occasioned by the tax. As regards the acquisition of commodities everything depends on the manner of acquisition, whether entirely, partly or not at all through pure personal exertion. The same proportion of different kinds of income or property may thus represent a varying economic faculty or ability; and in general the faculty may be said to increase as the element of labor decreases. Now, says Wagner, in the same way the varying amount of the same income or property connotes a different faculty, in the sense that a greater amount of income means a more than proportional faculty.

This argument, however, seems to be defective. Professor Wagner does not tell us why a varying amount of property connotes a different faculty. The larger sum may be the result of labor, the smaller one not. On this hypothesis the very reverse of the above argument would be true. From the standpoint of production Professor Wagner hence does not prove his case. He substantially rests his argument on the equality-of-sacrifice theory, from which he deduces progressive taxation, on the ground that the sacrifice varies with the varying amount of the "free" income.²⁶ Here again, however, he stands quite or almost alone in trying to prove that the

²⁵ "Die wirtschaftliche Leistungsfähigkeit einer Person liegt in zwei Reihen von Momenten, solchen welche den Erwerb und Besitz von Sachgütern, und solchen, welche die Verwendung dieser Güter zu eigener oder anderen pflichtsmässig zu ermöglichenden Bedürfniss Befriedigung betreffen." Wagner, *Finanzwissenschaft*, ii (2nd ed., 1890), § 184, p. 444.

²⁶ Wagner, *op. cit.*, ii (2nd ed., 1890), § 184, p. 446.

equality-of-sacrifice theory leads to progressive taxation, only on the assumption that it is the object of the state to remove inequalities of fortune. Unless we grant this, so runs the rather dubious reasoning, equality of sacrifice can lead only to proportional taxation.²⁷ Dubious reasoning, we say, because the sacrifice imposed on the individual depends on the property taken away from him, not on any theory of state activity. Professor Wagner's discussion is colored all through by this peculiar view of what he calls the fundamental principle of taxation.

Von Scheel takes about the same position as Wagner. He defines faculty as "the whole income (after deducting expenses of production) which can be demanded for purposes of taxation with due regard for the preservation of the standard of life."²⁸ This standard of life, says von Scheel, must be envisaged from the socio-political point of view. In order to enable the lower classes to preserve this standard, taxation must be progressive, for the lower down we go in the social scale, the smaller will be the proportion of income to standard of life. It is the function of the state to preserve the balance between the classes.²⁹

The socio-political argument of Wagner and von Scheel has already been criticised.³⁰ We may, therefore, pass it over in this place. Much the same may be said of the very short discussion by Professor von Heckel in his re-

²⁷ Wagner, *op. cit.*, p. 455, and esp. 381-386.

²⁸ "Das Maas der Steuerkraft des Staatsbürgers ist sein gesamntes nach Abzug der sachlichen Produktionsauslagen für seinen Haushalt disponibles Einkommen, welches unter Berücksichtigung und Wahrung seiner Lebenshaltung für die Steuer in Anspruch genommen werden kann." v. Scheel, "Die progressive Besteuerung." In *Tübinger Zeitschrift für die gesammte Staatswissenschaft*, vol. 31 (1875), p. 284.

²⁹ *Ibid.*, pp. 288, 292-296.

³⁰ Above, pp. 130 *et seq.*

cent treatise on the subject.⁸¹ Professor Cohn, in his admirably written work on the science of finance, also advocates progressive taxation,⁸² but as it does not add anything of moment to Neumann's views, it also may be neglected here.

The Austrian economist, Meyer, defines faculty vaguely as the "whole of the economic conditions which make it possible or easy for the individual to get together the tax."⁸³ That is to say, we must regard not alone his property and income, but the various modes in which he acquires the income and the calls upon him for consumption, or his necessary expenses. As soon, however, as we pay regard to his wants, we are dealing with the idea of sacrifice. The principle of faculty receives its real interpretation only through the principle of equal sacrifice. But, asks Meyer, what does the principle of equal sacrifice mean? Sacrifice of what?

The common argument that a proportional tax causes a smaller sacrifice in the case of large than of small income, because it takes away the means of enjoyment only from the less urgent wants, proves too much. For the same thing is true of every progressive tax. It is a necessary consequence of the differences in the satisfaction of wants. If we should attempt to arrange taxes so that they would always cut off the means of satisfying equally pressing wants, it would be necessary to take from the larger income the whole difference between it and the smaller income. This, however, is obviously absurd. It

⁸¹ M. v. Heckel, *Finanzwissenschaft*, i, 1907, pp. 184-185.

⁸² Cohn, *Finanzwissenschaft*, 1889, § 212. Cf. the English translation by Veblen, under the title, *The Science of Finance*, 1895, pp. 310-332.

⁸³ "Die Gesamtheit der wirtschaftlichen Momente, welche der Wirthschaft die Aufbringung der Steuer ermöglichen oder erleichtern." R. Meyer, *Die Principien der gerechten Besteuerung*, 1883, p. 311.

would be communism, not justice.⁸⁴ In the same way Neumann's theory does not seem to Meyer convincing. It leads logically only to the clear-income theory, or to the exemption of a certain minimum with proportional taxation thereafter.⁸⁵

Meyer endeavors to avoid these objections by declaring that the sacrifice in question consists not "in the intensity of the wants which remain unsatisfied, in consequence of the tax, but in the measure in which the tax increases the average intensity of the last wants actually satisfied."⁸⁶ He confesses that even this interpretation of equal sacrifice cannot serve as more than a probable proof of the necessity of progressive taxation. In the case of a low rate of tax, it is hard to say whether the sacrifices are equal or not. When we take high rates, however, the decision does not seem to him doubtful. In the case of a tax amounting to one-half or one-third of the income, a man who is reduced from \$1,200 income to \$600 or \$800 must beyond all question curtail his wants far more than he who was reduced from \$2,400 to \$1,200 or \$1,600. Inasmuch as it is legitimate to conclude that the effect of a smaller reduction of income will remain relatively the same, it may be asserted that the principle of equality of sacrifice connotes progressive taxation.⁸⁷

This theory of Meyer has been discussed in the body of

⁸⁴ Meyer, *op. cit.*, p. 331.

⁸⁵ This objection, as Cohen-Stuart, *Bijdrage*, etc., p. 119, points out, is not strictly true.

⁸⁶ Von dem hier vertretenen Standpunkte aus werden nun zwar die eben bekämpften Begründungen vermieden, indem wir das Opfer nicht in der Intensität der in Folge der Steuer unbefriedigt bleibenden Bedürfnisse, sondern in dem Masse erblicken, in welchem die durchschnittliche Intensität der letzten zur Befriedigung gelangenden Bedürfnisse in Folge der Steuer erhöht wird." Meyer, *op. cit.*, p. 332.

⁸⁷ *Ibid.*, p. 333.

this chapter.³⁸ We have seen that it rests on a misconception, and that in reality it does not alter the accepted theory in any important particular.

A recent ingenious attempt to defend progressive taxation against the common charge of arbitrariness has been made by the Scandinavian economist Cassell. Cassell starts out from the doctrine of the exemption of the minimum of subsistence, but he puts a different interpretation upon the old conception of "necessaries." The necessities of life, he thinks, differ with the grade of society. If, therefore, it is conceded "that a tax which is to produce an equal sacrifice must not take away any of those means which are needed to cover essential wants, then, for the sake of consistency, the deduction must be made greater for the higher classes of society."³⁹ Or, as he puts it in another place: "The income which it is necessary for a person's economical existence, increases on an average with the total real income, but naturally more slowly than this."⁴⁰

This is due to the fact that by "necessaries" we must understand not the necessities of merely physical subsistence, but what Professor Marshall calls "the necessities of efficiency."⁴¹ Thus in a very simple way we reach a mathematical and defensible scale of progression, for "if the deduction increases more slowly than the income, then clearly the remainder increases more rapidly than the income. A proportional tax levied on the remainder is thus a progressive tax on the total income." In other words, equal sacrifice means deduction of the

³⁸ Above, p. 213.

³⁹ Cassell, "The Theory of Progressive Taxation," in *The Economic Journal*, xi (1897), p. 481.

⁴⁰ *Ibid.*, p. 484.

⁴¹ A. Marshall, *Principles of Economics*, 4th ed., p. 137.

necessaries of efficiency and a proportional tax on the remainder.

The weakness in this interesting attempt to solve the problem of precision lies in the indeterminateness of the test proposed. This is virtually recognized by Dr. Cassell himself when he tells us that "views will diverge considerably when it comes to the arithmetical determination of the necessities of efficiency of the different classes of society. If we allow very high margins for the fullest efficiency of the manual laborers, and for the lower middle class, we will get a very strong progression. On the other side, if we think that the lower classes need nothing more than they have, indeed can make no good use of more, we should perhaps limit their deductions to the barest minimum of physical subsistence, and thus come to a nearly proportional scale. We see thus that the two principles which struggle with one another in the battle of progressive taxation, the democratic and the plutocratic principle, are still acting with full force in the limited field we have allowed for the discussion."⁴²

In reality, however, the limitation of the field to which Dr. Cassell refers is of very slight consequence when compared to the importance of the struggle between the two principles; for the range of a principle which leads either to "a very strong progression" or to a "nearly proportional scale" can not be called limited. As a matter of fact, therefore, the discussion is not materially advanced at all.

⁴² Cassell, *op. cit.*, pp. 487, 488.

E. *The Dutch Writers.*

We come finally to the Dutch economists who have worked out the principle of progressive taxation through the application of the marginal utility theory to the doctrine of equal sacrifice. The most prominent have been Pierson, Treub, van der Linden and Bok.¹ Their arguments, however, are approximately identical, and have already been summed up.² Above all their chief theories have been supplanted by a more recent work, which deserves a fuller treatment. We refer to the book of Cohen-Stuart.

Cohen-Stuart begins with defining equality of sacrifice. Regarded from the subjective point of view, there are four consequences of a tax: (1) the sacrifice of the money taken; (2) the sacrifice of enjoyments which this money might have procured; (3) the sacrifice of the proportion which this amount of enjoyment bears to the total enjoyments at the disposal of the taxpayer—which he calls, for short, the sacrifice; (4) the moral effect produced, or the pain. With the latter economics has noth-

¹ The chief passages may be found in:

N. G. Pierson, *Grondbeginselen der Staathuishoudkunde*, 2nd ed., (1886), p. 312. Also an article in *Gids*, February, 1888, esp. p. 308.

M. W. F. Treub, *Ontwikkeling en verband van de Rijks- Provinciale- en Gemeente-belastingen in Nederland*, 1885, p. 517.

Cort van der Linden, *De theorie der Belastingen*, 1887, pp. 89-100.

W. P. J. Bok, *De Belastingen in het Nederlandsche Parlement van 1848-1888*, 1888, pp. 177-178.

Two minor works are an article by A. W. Mees, "De progressieve inkomstenbelasting," in the (Dutch) *Economist*, 1889, p. 437; and Minderhoud to Sneek, "Bijdrage tot de Kennis der Inkomstenbelasting," in *Vragen van den Dag*, vol. iv (1889), no. 5.

² Above, p. 217 *et seq.*

ing to do. Now, equality of money sacrifice means that precisely the same sum be taken away from every one; equality of sacrifice of enjoyments means that all shall be deprived of equal enjoyments; equality of sacrifice means that everybody is to pay so much that the total enjoyment of each shall be diminished in relative proportion. That is, equality of sacrifice means "proportional sacrifice of enjoyments."⁸ Cohen-Stuart takes a long time to explain this, but it is in reality nothing new, being precisely what Mill expressed in other words.⁴

Cohen-Stuart then discusses the idea of faculty (*draagvermogen*), and accepts von Scheel's definition. Faculty necessarily implies exemption of the minimum of subsistence; and since faculty is conditioned by equality of sacrifice, the demand of just taxation reads as follows: To tax the individual in such a way that, above all, the amount of enjoyments of which he is deprived through the tax may be proportional to the total amount of enjoyments attainable through his economic condition, deducting that part which consists in the satisfaction of his absolutely necessary wants.⁵

⁸"*Gelijk geldsoffer* zoude dus verkregen worden, door ieder een gelijke som te laten opbrengen; *gelijk genotsoffer*, door ieder zooveel te laten opbrengen, dat allen een gelijke hoeveelheid genot derven; *gelijk offer* eindilijk, door ieder zooveel te laten betalen, dat het totale genot voor allen in dezelfde verhouding, evenredig dus, verminderd wordt, door m. a. w. te vergen een *evenredige hoeveelheid genot*." A. J. Cohen-Stuart, *Bijdrage tot de Theorie der Progressieve Inkomstenbelasting*, 1889, p. 33.

⁴Professor Edgeworth takes exception to this statement in his article on "The Theory of Taxation" in *The Economic Journal*, vii (1897), p. 557. But see above, pp. 214, 215.

⁵"De belastingschuldigen zoodanig te belasten, dat voor allen de hoeveelheid genot die zij door het betalen der belasting moeten derven, aan de totale hoeveelheid, direct tengevolge van hun economischen toestand, verkrijgbaar genot, met uitzondering van dat, hetwelk in de vervulling der behoeften van noodduft bestaat, evenredig zij." Cohen-Stuart, *op. cit.*, p. 58.

This problem, he thinks, can be solved only by mathematics, since the relation between enjoyment and income is really a mathematical relation. Adopting the nomenclature of his Dutch predecessors and of Jevons, he shows how the marginal utility of any commodity or of any quantity of income varies in some inverse ratio to the whole quantity. The curve which expresses this change he terms the line of utility (*nuttigheidslijn*). He takes for granted that the line of utility will gradually fall, but then proceeds to discuss the question whether this necessarily leads to progressive taxation.

We have already seen the acutely constructed tables⁶ by which he proves that the arguments hitherto used may be turned into a defense of proportional, or of regressive, as well as of progressive taxation, and that progressive taxation cannot be declared to be a necessary result of a fall in the line of utility, in order to secure equality of sacrifice.⁷ He then proceeds with his attempt to show how a definite rate of progression may be logically and mathematically constructed, and how progressive taxation may be rescued from the charge of arbitrariness. This constitutes the really constructive part of the work.

Cohen-Stuart starts with the hypothesis which was already made by Bernouilli, the Russian mathematician, in 1730, that the marginal utility of a definite part of income varies in inverse proportion to the total income; or in other words that the same percentage of income affords everyone an equal satisfaction, or that the owner of \$1,000 will feel the loss of \$1 just as little or as much as the owner of \$10,000 will feel the loss of \$10, or the owner of \$50,000 the loss of \$50. This would of course mean proportional taxation. If, however, we deduct a

⁶ Above, pp. 219 *et seq.* Cf. the review of Cohen-Stuart's book in *Political Science Quarterly*, vol. vii (1892), p. 337.

⁷ Cohen-Stuart, *op. cit.*, p. 123.

certain minimum of subsistence (which Cohen-Stuart thinks an indispensable condition in ascertaining real taxable ability), we should have the following scale of rates of taxation, worked out by him in detail:⁸

Income.	Minimum exempt, \$50. Ratio of marginal to total ability	Ratio, etc., 2 per cent.	Minimum exempt, \$500. Ratio, etc., 1 per cent.	Ratio, etc., 3 per cent.
	1 per cent.		1 per cent.	
\$500.....	0.69	1.38	0.00	0.00
1,000.....	1.38	2.73	0.69	1.38
2,000.....	2.06	4.07	1.38	2.73
5,000.....	2.95	5.82	2.28	4.50
10,000.....	3.62	7.11	2.95	5.82
20,000.....	4.29	8.39	3.62	7.11
50,000.....	5.16	10.05	4.50	8.80
100,000.....	5.82	11.30	5.16	10.05
200,000.....	6.47	12.51	5.82	11.30
500,000.....	7.32	14.10	6.67	12.90
1,000,000.....	7.96	15.28	7.33	14.10

Cohen-Stuart next proceeds on the supposition that the actual line of utility differs from his hypothetical line. Taking the figures of the last line, and assuming that the actual line curves either more or less than this hypothetical line, he constructs the following three tables according as the marginal utility varies inversely as the cube root of the square or of the fourth power of the income. The truth, he thinks, certainly lies between these extremes:

TAXES WHICH ARE TO PRODUCE EQUALITY OF SACRIFICE.

Income.	According to the line of the greater curve.	According to the hypothetical line.	According to the line of less curve
\$500.....	\$10	\$10	\$10
1,000.....	25	20	16
2,000.....	64	40	25
5,000.....	220	100	46
10,000.....	555	200	74
20,000.....	1,400	400	117
50,000.....	3,500	1,400	293
100,000.....	7,000	2,000	585
500,000.....	35,000	10,000	2,925
1,000,000.....	70,000	20,000	5,850

⁸ *Op. cit.*, p. 132.

It might appear that with these great variations in the figures the rate of progression of the tax would be very different. This, however, is not the case. In order to make a comparison he assumes that an income of \$5,000 pays in each case a tax of four and a half per cent, with \$500 exempted as minimum for subsistence. The result would then be as follows:

Income.	According to the line of greater curve.	According to the original line.	According to the line of less curve.
\$500.....	0.00	0.00	0.00
1,000.....	1.04	1.38	1.75
2,000.....	2.30	2.73	3.13
5,000.....	4.50	4.50	4.50
10,000.....	6.57	5.82	5.29
20,000.....	9.11	7.11	5.92
50,000.....	10.33	8.80	8.27
100,000.....	11.19	10.05	10.06
200,000.....	12.01	11.30	11.82
500,000.....	13.08	12.90	14.09
1,000,000.....	13.88	14.10	15.76

We see what a striking similarity in the percentages results, notwithstanding the great differences in the taxes paid. Since he has chosen two extremes, Cohen-Stuart thinks that he is justified in asserting that the mean (from which the extremes vary so little) is approximately the correct scale of progressive taxation.

In other words, the conclusion is that when we neglect the minimum of subsistence, the theory of equality of sacrifice must result in a progressive scale which does not greatly vary from the original hypothetical scale, as long as we do not reach the very large incomes. In the case of very large incomes the rate of progression tends to decrease until the progression turns into proportion. Thus, the general rule may be laid down: Arithmetical increase of the rate with geometrical increase of the income up to

a definite point when progression is replaced by proportion.⁹

The investigations of Cohen-Stuart are acute and suggestive, but it cannot be said that he proves his point, or that he is able to lay down an approximately exact necessary scale of progression. His original table is confessedly only hypothetical and arbitrary; and it is difficult to see how three hypothetical scales can prove the existence of one real scale. All three may be perfectly justifiable or completely unjustifiable in themselves; but the mere fact that they approximately agree does not in the least prove that any of them is correct. They may all be wrong. We do not know whether the marginal utility is inversely proportional to the income, or to the cube root of the square, or to the cube root of the fourth power, or of any power of the income. One table is as good as another, but each is equally incapable of proof. Cohen-Stuart's tables depend not only on the arbitrary assumption of a definite ratio of marginal utilities, but also on the equally arbitrary assumption of a definite minimum of subsistence. As soon as we exempt a different minimum, or do not exempt any minimum at all, the scale is altogether changed. To measure the amount of sacrifice in such a manner as to produce a mathematical equality of rate is quite impossible. Mathematics cannot help us here, because the very first conditions fail us—the power to gauge with precision the mathematical relation of the marginal utilities. Psychological relations cannot be reduced to exact quantitative forms. Thus Cohen-Stuart's

⁹ "Arithmetische klimming van het percentage bij geometrische klimming van het inkomen, zoolandig men nit in zeer hooge percentages komt." *Op. cit.*, p. 168.

laborious investigations do not succeed in creating anything more positive than did those of his predecessors.¹⁰

¹⁰ The essay of Graziani, "La Ragione progressiva del Sistema Tributario in rapporto al Principio del Grado Finale d'Utilità," in *Giornale degli Economisti*, Serie Seconda, Anno ii, (1891), p. 156, follows the work of Cohen-Stuart, and accepts his conclusions, without recognizing the inherent weakness of the argument. In a later work, however, Graziani parts company with Cohen-Stuart, for the reasons mentioned above, but still upholds progressive taxation, basing his defense on the proposition that progressive taxation is necessary in order to attain equality of value, when the diminution in the marginal grade of utility takes place, not in the same proportion as the increase of income, but in a greater proportion. (See Graziani, *Istituzioni di Scienza delle Finanze*, 1897, p. 304.) On the other hand, the work of the Spanish economist Piernas-Hurtado, *Tratado de Hacienda Pública*, 1891, confesses that no exact or mathematical relation can be established. But the author nevertheless posits the principle of "liquid assets," *haberes líquidos*, as the basis of taxation, meaning by this a determination of the individual economic situation, as gauged by the necessary expenses. This, he thinks, means neither proportional nor progressive taxation, but an adjustment to each individual case. Cf. vol. i, pp. 302, 312. This is obviously too vague to be made the basis of a scientific discussion.

F. *Recent English and American Writers.*

More recently another interpretation of the sacrifice theory has been advanced by Professors Edgeworth and Carver. Professor Edgeworth claims¹ that the real ethical principle is not equal sacrifice but minimum sacrifice. Starting from the Benthamite utilitarianism, he contends that the greatest happiness principle implies that "the total net utility theory procured by taxation should be a maximum." This, however, he thinks "reduces to the contention that the total disutility should be a minimum." It follows from this "in general that the marginal disutility incurred by each tax payer should be the same."² Hence, instead of "equal sacrifice" we should speak of "equi-marginal sacrifice,"³ i. e. that the margin of sacrifice of each should be the same. Since the sacrifice of each would at this point be the least in amount, we have the realization of the principle of "minimum sacrifice."

Professor Edgeworth is too keen a thinker not to realize what this implies. He tells us that the "solution of the problem is that the higher incomes should be cut down to a certain level," or that "the richer should be taxed for the benefit of the poorer up to the point at which complete equality of fortunes is attained." Yet as a practical man he shrinks from this conclusion. "The acme of socialism is thus for a moment sighted, but it is immediately clouded over by the doubts and reservations." The "enormous interposing chasms which deter practical wisdom from

¹ "The Pure Theory of Taxation," in *Economic Journal*, vii (1897), pp. 551-571.

² *Op. cit.*, p. 553.

³ *Op. cit.*, p. 564.

moving directly toward that ideal" are, according to Professor Edgeworth, the dangers of any forcible equalization of wealth which appeared to Sidgwick to consist in a diminution of production and an increase of population,⁴ and to Mill to consist in the menace to liberty.

The objection will at once arise that a theory which according to the confession of its author is so completely inapplicable is perhaps of no real validity. Its impracticability renders it subject to grave suspicion. Moreover, as has been well pointed out by Dr. Weston,⁵ not only is it by no means certain, even from the standpoint of "pure theory" that the largest sum total of utility is the real aim of political action, but it is also true that the minimum-sacrifice theory assumes as a basis of action a principle which is quantitatively as indeterminable as anything that is to be found in the equal-sacrifice theory of Mill, Sax or Meyer. As Weston furthermore says, it is "strange that one who is *par excellence* a mathematical economist should find satisfaction in a theory based on a principle that does not even permit of an exact mathematical expression," since, in the words of Edgeworth himself, "the reasoning from the principle of minimum sacrifice assumes no exact relation between utility and means."⁶

The minimum-sacrifice theory is thus really not a whit more successful than the equal-sacrifice theory and possesses the additional disadvantage of being less applicable to the problems of actual life.

⁴It might appear from Professor Edgeworth's statement that Sidgwick approved of the minimum sacrifice theory. This is, however, not the fact. See above, p. 262.

⁵Stephen F. Weston, *Principles of Justice in Taxation*, in *Columbia University Studies in History, Economics and Public Law*, vol. xvii, no. 2, (1903), p. 205.

⁶Edgeworth, *op. cit.*, p. 567.

Professor Carver, who reached similar conclusions at almost the same time, but in an independent fashion, lays down the principle somewhat differently.⁷ According to Professor Carver the really logical equality of sacrifice is the equality of marginal sacrifice, which is only another way of putting the principle of minimum sacrifice. The true criterion of justice in the distribution of the burdens of taxation is, according to him, the least evil to the least number. The evils of taxation, however, are two-fold—the sacrifice to those who pay the taxes and the repression of industry and of enterprise which the taxes occasion. The minimum of repression is secured by an equality of sacrifices; but the minimum of total sacrifice is attained by an extreme form of progressive taxation, which results in the greatest inequalities of sacrifice and which would have the most violent and disastrous repressive consequences. Hence sacrifice alone cannot be considered as the most important consideration, and it is only by combining the two points of view that we can reach a practical progressive scale.⁸

In another place, however, Professor Carver puts his thought a little differently. There are really two kinds of sacrifice—the direct sacrifice to the individual in having his income curtailed by the amount of the tax, and the indirect sacrifice. Any tax, which represses a desirable industry or form of activity, imposes a sacrifice not only upon him who pays it, but also upon those who are deprived of the services or the products of the repressed industry. Taxes should, therefore, be apportioned in such a way as to impose the smallest sum total of sacrifice of

⁷T. N. Carver, "The Ethical Basis of Distribution," in the *Annals of the American Academy of Political and Social Science*, vi (1895), p. 97; and "The Minimum Sacrifice Theory of Taxation," in the *Political Science Quarterly*, xix (1904), pp. 66-79.

⁸*Annals of the American Academy*, vi, p. 99.

these two kinds.⁹ This means a moderately progressive rate, because the drastic scale which would follow from the principle of direct sacrifice would have to be counter-balanced by the somewhat composite scale which would ensue from the principle of indirect sacrifice.

The weakness of this ingenious argument is due to the fact that the indirect sacrifice of which Professor Carver speaks has no necessary relation to the progressive scale. The repressiveness of a tax is due far more to the nature of the tax than to any scale of graduation. In the case of certain taxes on production a high proportional tax would be exceedingly repressive; while in the case of other taxes, not even a progressive tax would be repressive. As Professor Carver himself points out, a progressive tax on land would not repress ownership of land, a progressive tax on inheritances would not repress inheritance. The same argument might be applied to general income taxes, where the incomes cannot be brought into relation with any particular kind of production, and where a progressive rate would thus not repress any particular product. The argument, moreover, would equally apply to a general property tax, where the tax is assessed on no particular class of property, but on the total wealth of the individual.

We must not confuse the two largely disparate facts. The indirect sacrifice of which Professor Carver speaks may have no connection at all with the direct sacrifice of the taxpayer, and according to Professor Carver's own doctrine there is no reason why taxes on general property or income or land or inheritances should not be arranged according to a well-nigh confiscatory scale.¹⁰ The mini-

⁹ *Political Science Quarterly*, xix, p. 72.

¹⁰ "A progressive tax is therefore to be commended unless the rate of progression is made so high as to discourage the receivers of large incomes from trying to increase them." *Political Science*

mum-sacrifice theory thus to all intents and purposes becomes equivalent to the confiscatory or socialistic theory which has been discussed above.

Hence neither in the version of Professor Edgeworth nor in that of Professor Carver does the doctrine of minimum sacrifice afford us any real help or constitute any improvement upon the doctrine of equal sacrifice.

Quarterly, xix, p. 79. No tax short of one hundred per cent would completely discourage this, and at all events it would take far more than the "moderately progressive tax," of which Professor Carver speaks, to accomplish this result.

CHAPTER IV.

CONCLUSION.

We have thus far learned the chief arguments urged for and against progressive taxation. We have seen the inadequacy of the socialistic as well as of the compensatory theories in favor of, and the weakness of the benefit theory in opposition to, the doctrine of progression. We have analyzed more closely the equal-sacrifice doctrine and have found that it is inadequate to serve as the basis of a definite and infallible scale of progression. Are we then to abandon progressive taxation in theory?

Before answering this question, it will be desirable to revert to the fundamental conception of faculty or ability, which is after all the best standard we have of the measure of general obligation to pay taxes, and to seek to ascertain what the faculty theory in its wisest interpretation can teach us in the matter.

President Walker's definition of faculty is well known.¹ Faculty, says he, is "the native or acquired power of production." If, however, we analyze faculty more closely, in the sense in which we instinctively use the word in tax matters, we see that it means something more than that. It not only implies native or acquired power of production, but includes at least also the opportunity of putting these powers to use, as well as the manner in which the powers are actually employed and the results of their use as measured by the periodical or permanent accretion to the producer's possessions. We have seen how the original idea was that represented by President Walker, but how this

¹F. A. Walker, "The Bases of Taxation," in *Political Science Quarterly*, iii (1888), p. 14.

was soon supplanted by the more real and practicable tests, first of property (or permanent accretion), then of income (or periodical accretion). But, furthermore, faculty connotes an additional conception. It means not only powers of production or results of powers of production, but also the capacity to make use of these powers or of these results—the capacity in other words of enjoying the consequences of the exertions. It is this latter conception which has been developed by recent writers, although they have carried it to an extreme just as one-sided as that represented by the advocates of the earlier theories. The elements of faculty, then, are two-fold—those connected with acquisition or production, and those connected with outlay or consumption. What is the application to the topic in hand?

If we regard only the first set of elements, it is evident that the possession of large fortunes or of large incomes in itself affords the possessor a decided advantage in augmenting his possessions. The facility of increasing production frequently grows in more than arithmetical proportion. A rich man may be said to be subject to a certain sense to the law of increasing returns. The more he has, the easier it is for him to acquire still more. The initial disadvantages have been overcome. This was emphasized already by Adam Smith, when he said: "A great stock, though with small profits, generally increases faster than a small stock with great profits. Money, says the proverb, makes money. When you have got a little, it is often easy to get more. The great difficulty is to get that little."² In fact the same idea was originally pointed out by Rousseau two decades earlier as an additional argument for progressive taxation. "The difficulty of acquisition," he tells us, "always grows in pro-

² *Wealth of Nations*, book i, chap. 9.

portion to one's needs. Nothing is made with nothing: that is as true in business as in physics. Money is the seed of money, and the first pistole is sometimes more difficult to earn than the second million."⁸ While the native power of production in other words remains as before, this "acquired power" has greatly augmented. Hence, from the point of view of production faculty may be said to increase more rapidly than fortune or income. This element of taxable capacity would hence not illogically result in a more than proportionate rate of taxation.

On the other hand, the elements of faculty which are connected with outlay or consumption, bring us right back again to the sacrifice theory. While the idea of faculty includes that of sacrifice, however, the two ideas are not coextensive. Faculty is the larger, sacrifice the smaller conception. Faculty includes two sets of considerations, sacrifice only one. While the sacrifice theory in itself, as we have seen, is not sufficiently cogent to lead to the demand for any fixed scale of progression, its influence in the other direction is assuredly not strong enough to outweigh the productive elements of faculty, which seem to imply progressive taxation. In fact, we may go farther and say that the sacrifice theory, or consumption element in faculty, can certainly not be used as an argument inevitably leading to proportional taxation. If it does not necessarily lead to any definite scale of progression, much less can it necessarily lead to a fixed proportional taxation. But if we never can reach an ideal, there is no good reason why we should not strive to get as close to it as

⁸ "La difficulté d'acquérir croit toujours en raison du besoin. On ne fait rien avec rien; cela est vrai dans les affaires comme en physique; l'argent est la semence de l'argent, et la première pistole est quelquefois plus difficile à gagner que le second million." Rousseau, *Discours sur l'Oeconomie Politique*, 1758, p. 63. See above pp. 192-4.

possible. Equality of sacrifice, indeed, we can never attain absolutely or exactly, because of the diversity of individual wants and desires. It is nevertheless most probable, however, that in the majority of normal and typical cases, we shall be approaching more closely to the desired equality by some departure from proportional taxation. In certain cases even, regressive taxation might accomplish the result best, in other cases proportional taxation would be the most serviceable. If we take a general view, however, and treat of the average man—and the government can deal only with classes, that is, with average men—it seems probable that on the whole less injustice will be done by adopting some form of progression than by following the universal rule of proportion. A strictly proportional rate will make no allowance for the exemption of the minimum of subsistence. It will be a heavier burden on the typical average poor man than on the typical average rich man. It will be apt to be felt with relatively more severity by the average man who has only a small surplus above socially necessary expenses, than by the average man who has a proportionally larger surplus. It will in short be likely in normal cases to curtail disproportionately the enjoyments of different social classes.

Hence, if we base our doctrine of the equities of taxation on the theory of faculty, both the production and the consumption sides of the theory seem to point to progressive taxation as at all events neither more illogical nor more unjust than proportional taxation. It may, indeed, frankly be conceded that the theory of faculty cannot determine any definite rate of progression as the ideally just rate. To this extent there seems to be some truth in Mill's contention that progressive taxation cannot give that "degree of certainty" on which a legislator should act; as well as in McCulloch's assertion that when we abandon

proportion we "are at sea without rudder or compass."⁴ It is true that proportion is in one sense certain, and that progression is uncertain. The argument, however, proves too much. An uncertain rate, if it be in the general direction of justice, may nevertheless be preferable to a rate which, like that of proportion, may be more certain without being so equitable. Half a loaf is better than no bread. Stability is assuredly a good thing. It is highly questionable, however, whether a stability which is necessarily unjust is preferable to an instability that works in the general direction of what is recognized as justice. All governmental actions which have to do with money relations of classes are necessarily more or less arbitrary. The fines imposed by the courts, the fixing of the rates of import duties or of excise taxes are always, to a certain extent, inexact. In truth, a strict proportional tax, if we accept the point of view mentioned above, is really more arbitrary as over against the individual taxpayers, than a moderately progressive tax. The ostensible "certainty" hence involves a really greater arbitrariness.

In the same way, the other arguments often advanced against progression seem to be in some measure destitute of foundation.⁵

⁴ This familiar argument, as to the arbitrary character of progressive taxation, is, perhaps, best put by Lecky, *Democracy and Liberty*, i, p. 286 *et seq.*

⁵ The objections commonly urged are well summed up in Bastable, *Public Finance*, 1892, pp. 285-289; 3rd ed., 1903, pp. 308-313. They are also impressively catalogued in the brief of ex-President Harrison, Messrs. Guthrie and Prussing, acting as counsel for plaintiffs in the Illinois Inheritance Tax Cases, before the Supreme Court of the United States in 1897. See esp. pp. 42 *et seq.* of the brief, as well as the oral arguments of Messrs. Guthrie and Harrison.

Among the more important of the earlier arguments opposed to progressive taxation must be mentioned those advanced at the time of the French Revolution, especially by Dauchy, Saint-Aubin and Jolivet. Cf. Dauchy, *Rapport contre le Système de l'impôt Pro-*

The most common objection is that of confiscation. This can be traced back as far as the time of Guicciardini. Confiscation, he thinks, is an inevitable result of progressive taxation. "It lies in the nature of things that the beginnings are slight, but unless great care is taken the rates will multiply rapidly, and finally reach a point that no one

gressif fait à la Séance du 10 Frimaire, an IV (Dec. 1, 1795); Saint-Aubin, Encore quelques Réflexions sur l'Emprunt Forcé, n. d. (1795); Jollivet, De l'Impôt Progressif et du Morcellement des Patrimoines, an V (1796); Jollivet, Pétition au Conseil des Cinq Cents contre l'Emploi des Progressions dans les Contributions et les Emprunts Forcés, II Thermidor an VII (1798). Jollivet, who made the most elaborate attempt to refute the progressive principle, sums up his objections as follows:

"Il détache l'individu de l'exercice de son industrie et du droit de propriété qui en est la recompense.

"Il est contraire au pacte social et à la constitution.

"Il corrompt toutes les classes de la société, riches et pauvres.

"Il détruit successivement les productions de la nature et de l'industrie par la division et le morcellement à l'infini des patrimoines; de-là la disette, puis la famine.

"Il augmente l'intérêt de l'argent.

"Il viole ouvertement le principe de l'égalité proportionnelle entre les localités et les communes.

"Il intervertit les fortunes, en rendant plus riches qu'un autre celui qui l'était moins.

"Il porte la corruption jusques dans ses propres agens.

"Il dégrade les autres contributions publiques, et conduit très rapidement à la banqueroute.

"Il apprend aux hommes à se mieux dérober à l'impôt.

"Il éteint en eux l'amour de la patrie.

"Cet impôt est donc le plus redoutable ennemi, l'adversaire le plus dangereux que la malveillance puisse jamais opposer à l'établissement ou à la conservation de la république.

"Qu'est-ce donc l'impôt progressif. Une loi agraire déguisé impossible à réaliser. Veut-on insister . . . Alors l'impôt progressif se détruit de lui-même, il ne peut avoir aucune durée, en un mot, il porte avec lui son principe de destruction, puisque sa matière imposable doit se dérober successivement à tous les égards, et disparaître enfin par la division et le morcellement des patrimoines.

"Ainsi donc, en dernière analyse, c'est le vautour déchirant ses propres entrailles." *De l'Impôt Progressif, pp. 94-96.*

could have foreseen.⁶ The natural result of this is that virtue, industry and application are replaced by laziness, rapacity, treachery, foul words and worse deeds.⁷ All of which things are as sweet morsels to the taste, the effects of which, however, will finally show that we have been dealing with a poison."⁸ Although the substance of this argument has frequently been repeated in modern times, the objection that progression is confiscation because it must finally end by swallowing up the entire capital may be obviated, as we have seen, by making the rate of progression itself degressive; so that it would become impossible to reach one hundred per cent or any like percentage of large fortunes.

The objection that it is a fine imposed on industry and saving is really applicable not to progressive taxation as such, but to the whole system of taxation on property or income. The logical conclusion from this would be the demand for taxation only on expense; and even that would be to a certain extent a tax on industry. It is difficult to see, however, why industry and saving should not be taxed, if they increase capacity to pay taxes; and it is still more difficult to see how we can avoid taxing indus-

During the revolution of 1848 the objections to progressive taxation were again vigorously advanced in France, especially by Parieu in a legislative committee report, and by Servi re and Charency in the legislature. These are all summed up and discussed in detail by Vauthier, *De l'Imp t Progressif*, 1851, pp. 9, 55. As to Parieu, see above, p. 231.

⁶"E la natura della cose che i principii cominciano piccolli; ma si l'uomo non avvertisce, moltiplicano presto e scorrono in luoglio che poi nessuno a tempo provvedervi." Guicciardini, p. 337. Cf. *op. cit.*, above on page 135.

⁷"D'onde in luogo della virtu, della industria, dello affaticarsi, nascono ozio, rapacita, ignavia e male parole e peggiori fatti."

⁸"Le quali cose paranno al gusto cibi dolci, ma gli effetti mosterranno alle fine che sara stato veleno."

try. Furthermore, it is a mistake to assume that larger fortunes are always the result of individual saving. The argument, in short, is not an argument against progression, but against taxation in general. If a moderately progressive tax is really more equitable than a strictly proportional tax, progression will be less of a fine on thrift and industry than proportion would be.

Again, the argument that progressive taxes are not productive of revenue is of slight weight. The contention has never been urged that progressive taxes yield less than proportional taxes; at most it has been claimed simply that they do not yield more. The function of progressive taxation, however, as has already been pointed out in a previous chapter, is not so much to secure increased revenue as to apportion the burden more equably among the taxpayers. If it is conceded that the progressive tax is more equitable than the proportional tax it is quite immaterial whether it yields more revenue or not.

Finally, a somewhat widespread objection to progressive taxation is contained in the argument which has been well put by Lecky, when he tells us that highly graduated taxation realizes most completely the supreme danger of democracy, creating a state of things in which one class imposes on another burdens which it is not asked to share, and impels the state into vast schemes of extravagance under the belief that the whole cost will be thrown upon others. "The belief is no doubt very fallacious, but it is very natural, and it lends itself most easily to the clap-trap of dishonest politicians. Such men will have no difficulty in drawing impressive contrasts between the luxury of the rich and the necessities of the poor, and in persuading ignorant men that there can be no harm in throwing great burdens of exceptional taxation on a

few men, who will still remain immeasurably richer than themselves."⁹

The same point has been urged by an American, Mr. W. D. Guthrie, in an argument opposing the constitutionality of the so-called "Dudley Bill" passed by the Legislature of New York in 1897, providing for a progressive inheritance tax, and which was in consequence vetoed by Governor Black. "The great danger of all democracies," says Mr. Guthrie, "is that one class votes the taxes for another class to pay. Heretofore, our bulwark has been that, as all taxes were equally and uniformly imposed, classes could not be discriminated against, and this protected all. . . . Introduce the policy of graduated taxes, establish the doctrine that they are permissible under our system, and the whole burden of taxation can be thrown on a few rich."¹⁰ To this argument, which is obviously political rather than economic in character, it may be replied that the fears here expressed have not been realized in practice, and that the reasoning, if carried to its logical conclusion, would result in a complete distrust of democratic government as such. There is no advantage in conjuring up fanciful dangers which have been disproved by experience.

While the theoretical objections to progressive taxation are thus in large measure destitute of foundation, it is possible to draw only this rather vague conclusion as to the general legitimacy of the principle of progression.¹¹

⁹ Lecky, *Democracy and Liberty*, i, p. 287.

¹⁰ *Argument of William D. Guthrie, submitted to the Hon. Frank S. Black, Governor of the State of New York, in opposition to the Dudley Bill, imposing a graduated inheritance or transfer tax, 1897*, pp. 16, 17.

¹¹ This is also the conclusion of Armitage-Smith in his *Principles and Methods of Taxation*, 1906, p. 52: "On the whole the argument for graduation on a rational and moderate scale seems to be valid: it helps to satisfy the demands of equity and productiveness, if the

The practical application of the principle on the other hand depends on a series of important considerations.

In the first place we are confronted by the question of incidence. If the theory of general diffusion of taxation be true, it makes no difference whether we levy a proportional or a progressive tax. For, since the tax would ultimately be shifted to the consumer, the taxpayer would not be injured, while the consumer would bear the tax only in proportion to what he consumed. It is a singular fact that this questionable procedure of the advocates of the diffusion theory has always been overlooked. For the most heated opponents of progressive taxation have been, like Thiers, advocates of the diffusion theory of taxation, without perceiving the weakness of their position. The diffusion theory of taxation, however, we know to be far from correct.¹² Nevertheless, to the extent that taxes really are shifted from the taxpayer, the problem of progression loses its importance. For if taxes are actually shifted, the rate in the first instance is of no essential consequence. It is only in so far as we assume that so-called direct taxes remain where they are put, that the considerations of faculty or ability are of any weight. How far this assumption is true has been investigated in another place. For the purpose of the theoretical discussion it may be taken for granted that the problem of progression *versus* proportion must be treated on the hypothesis that the assumption is true. When we come to construct a progressive scale in practice, however, we must be careful to ascertain how far the assumption conforms to reality. A progressive scale of taxation which does

principle be limited to a few direct taxes in a mixed system. It is also the general conclusion of Professor Henry C. Adams in his *Science of Finance*, 1898, pp. 352-353.

¹² See Seligman, *On the Shifting and Incidence of Taxation*, 2nd ed., 1899.

not reach individual faculty at all is as unnecessary as it is illogical.

Secondly, the defence of progression rests on the theory that it is applicable to general taxation, taken as a whole. It is based on the assumption that taxes are paid out of revenue, and that the whole system is framed with this end in view. It is obviously an immensely difficult task, however, to shape a whole system of taxation so that the average general rate will be a moderately progressive one. Actual systems of taxation are of the most varied kinds. In some taxes it is impracticable to introduce a progressive scale, as they are by their very nature proportional, so *e. g.*, tithes or poll taxes,—for a graduated poll tax is really not a poll tax at all but a class tax. In other cases the taxes in actual life are even regressive, as in the case of many of the indirect taxes. It would be impossible thoroughly to carry out the principle of general progression unless we had a single universal income tax, or a single property tax. But no prominent writer to-day favors a single income tax, or a single property tax, or for that matter a single tax of any kind. Thus in advocating the system of progression we must have regard to the facts of the individual case, and to the general sentiment of the community. In the United States, for instance, the general property tax in its practical operation is largely regressive, especially in so far as personalty is concerned. The tax reformers have quite enough to occupy their attention in the endeavor to make the rate really proportional, before bothering themselves with the more ideal stage of progression. It is all the more worthy of consideration, however, whether other taxes may not properly be levied according to the progressive principle. It is more than likely that a number of moderate progressive taxes would after all simply

result in securing an average proportional rate for the whole system of taxation. We have in fact seen¹³ that some defenders of proportion in theory admit the legitimacy of certain progressive taxes as a compensation for other really regressive taxes. In practice, then, it is possible frequently to demand progressive taxes without being at all so extreme or so "communistic" as many persons believe.

Thirdly, the defence of progressive taxation rests on the assumption of faculty as the basis of taxation. While this is indeed true of taxation as a whole, for general state purposes, it is questionable whether the principle of benefits is not of some weight in problems of purely local and municipal finance. A discussion of the contest between these two principles and of the limits of their relative applicability to different phases of public revenues would take us too far astray here. It may, however, be said that it is coming more and more to be recognized that within the domain of the taxing power the principle of benefits should be followed to some extent in strictly local finance.¹⁴ If this is true, the principle of progression will be of rather more limited application to some of the charges employed for the support of local government; for the theory of benefits, as we have seen, leads logically to proportion, not to progression. Thus the practical sphere of the applicability of the progressive principle would be even more circumscribed.

Finally, it must not be overlooked that high rates of progression may engender or augment attempts at fraud and evasion. That this is possible cannot be denied. As has already been pointed out,¹⁵ however, the danger is

¹³ Above, p. 147.

¹⁴ For a discussion of these points see the chapter on "The Classification of Public Revenues" in Seligman, *Essays in Taxation*.

¹⁵ Above, p. 75.

apt to be greatly exaggerated. We know that there is certainly more fraud in the countries of proportional taxes like America than in the home of progressive taxes like Switzerland or Germany. Nevertheless, it may be conceded that with progressive rates there would probably be still more fraud than actually exists, even though the fears of the doubters in Australia and Switzerland have not been realized.¹⁶ Much depends on the manner in which progression is applied, and on the particular tax to which it is extended. Still more depends on the rate of the progression. The higher the progression the greater the likelihood that the results will be perceptibly bad. The objection, however, is really one against the abuse, not the use, of the progressive principle.

If, therefore, we sum up the whole discussion, we see that while progressive taxation is to a certain extent defensible as an ideal, and as the expression of the theoretical demand for the shaping of taxes to the test of individual faculty, it is a matter of considerable difficulty to decide how far or in what manner the principle ought to be actually carried out in practice.

Theory itself cannot determine any definite scale of progression whatever. While it is highly probable that the ends of justice would be more nearly subserved by some approximation to a progressive scale, considerations of expediency as well as the uncertainty of the interrelations between various parts of the entire tax system should tend to render us cautious in advocating any general application of the principle. It remains to investigate as to how far the principle is applicable to the conditions surrounding us in America to-day. In last resort, however, the crucial point is the state of the social consciousness and the development of the feeling of civic obligation.

¹⁶ Above, pp. 76, 124.

PART III.
APPLICATION OF THE PROGRESSIVE
PRINCIPLE TO AMERICAN TAXATION.

§ 1. *The General Property Tax.*

The preceding discussion has brought us to a general, but somewhat vague, conclusion in favor of the theory of progressive taxation. Economists, however, must deal with what is actually practicable, as well as with what is ideally true. It is with this practical object in view that we now proceed to a consideration of the progressive principle in the light of the concrete facts of American public finance.

In the case of the general property tax the progressive principle would seem to be of doubtful expediency, for several reasons. In the first place, the tax as actually administered is not progressive nor even proportional, but regressive. Our attempt to tax intangible personalty leads to a heavier burden on those who are at the same time honest and fairly well-to-do than on those who happen to be both dishonest and wealthy. Since the temptations to evade the tax are likely to grow with its size, it may be assumed that fraud will increase in proportion to wealth. To augment the tax rate on the wealthier would therefore simply increase dishonesty. Progressive taxation of personal property would result in the less well-to-do classes bearing a still greater proportion of the taxes than they do at present. Instead of greater equality we should have greater inequality. Progressive taxation of personalty under actual conditions would be an utter delusion.

Secondly, progressive taxation of real estate would demand, as a preliminary condition, a complete reform of most of our tax-laws. As a general rule the American commonwealths do not pay any attention to the ques-

tion whether or not the realty is mortgaged. They generally tax the landowner on the full value of the land, and very frequently tax the mortgagee in addition on the amount of the mortgage. Now, unless we exempt the value of the mortgage from the value of the land, a progressive rate on realty would create far more inequality than exists at present. Let us assume two land-owners, A, the owner of a \$10,000 farm mortgaged for \$5,000, and B, the owner of a \$100,000 farm mortgaged for \$95,000. The equity is the same in each case, and under a rational system of taxation both A and B would pay on only \$5,000.¹ Each would then be taxed on what he really has, in lieu of on what he has not. The prevalent American system, however, makes of the tax on real estate a real tax, not a personal tax: that is, the tax is levied not on the landowner as such, but on the land. If it were levied on the landowner the tax would be a personal tax, that is, a tax on the person, and the government would be bound to take account of the existing debts. But as it is usually levied on the land, instead of on the owner, the government looks to the land alone and maintains that the personal condition of the owner is immaterial. If a progressive tax were introduced, A would pay, let us say, two per cent on \$10,000 or \$200, while B might pay five per cent on \$100,000 or \$5,000. B's entire equity would thus be swallowed up by the tax, and although he is actually in no better condition than A, he would have to pay not five times, but twenty-five times as much. Pro-

¹ Unless, indeed, the mortgages in the hands of the mortgagees are exempt. In this case the government would be justified in making the land contribute its share; for it is immaterial to the mortgagor whether he pay the tax directly to the government, or indirectly by being charged a higher rate of interest on the loan, in case the mortgagee is taxed. Cf. *Essays in Taxation*, p. 35, and the limitations of the theory in the monograph *On the Shifting and Incidence of Taxation*, 2nd ed., 1899, pp. 266-268.

gressive taxation under the existing system of real estate taxation would thus be a gross injustice, utterly ruinous to a large class of farmers. For whatever may be true as to the shifting of a proportional tax on land, it is evident that a progressive tax of this kind at all events can not be shifted. In fact every treatise thus far written on the incidence of taxation takes it for granted that we are dealing with a proportional tax. It would be interesting to trace in detail the qualifications to be introduced in the theory of incidence in the case of progressive rates, not only in the property tax, but in other taxes as well.

Thirdly, the very fact that the property tax is in great part a real tax would militate against the introduction of the progressive principle. The basis of progressive taxation, as we have seen, is the faculty theory of taxation, resolved into its elements of consumption and production. A progressive property tax can be defended only on the assumption that faculty increases with general property. When, however, in place of assessing the tax on the individual as such, we assess it on his realty wherever it lies, and on his personalty wherever we can locate it, we are looking not at the individual, but at the taxable object. The owner of a large piece of real estate may as a matter of fact possess less faculty or ability to pay taxes than the owner of a small plot, because he may have very much less personalty. If we could reach personalty as well as realty then, indeed, it would be immaterial. Since personalty, however, evades taxation in the ratio of its extent and of the amount of the tax, a progressive tax on realty, under existing conditions, might intensify the actual inequalities. To tax A, the owner of a \$10,000 farm (who has perhaps \$1,000 personal property), five per cent, and to tax B, the owner of a \$1,000 lot (who has the remainder of his large fortune invested in intangible personalty,

on which he pays nothing), only one per cent would be a travesty of justice.

Fourthly, the chief practical objection to the introduction of the progressive principle is that it would be exceedingly difficult to apply it to the taxation of real estate, if the prevalent method of assessing the tax as a real tax be followed. The tax varies with the value of the lot, not with the property of the lot owner. Lot A may be worth more than lot B, but lot A may be owned by two persons, and lot B by only one person. Or the owner of the smaller lot B may have a hundred other small lots in other parts of the city, while the owner of lot A has only that one lot. A higher tax on A because it is the larger lot would be absurd. The large land owner, provided he distributes his holdings, would pay lower rates of taxation than the small land owner whose holdings are massed together. The only result of this would be a tendency to divide land into fractional parts.

It is true that such a method of taxation would tend to split up large estates. This was indeed one of the avowed objects of the graduated land tax in New Zealand, whose influence is already perceptible. The same idea is at the basis of the recent land tax legislation in Oklahoma, where the aim is to prevent the formation of large estates. The division or prevention of large estates, however, does not necessarily mean the abolition of large fortunes in landed property. It may indeed tend to prevent the successful competition of an agricultural country with its rivals in the world market, to the extent that cheap wheat raising depends on the economies of production on a large scale. There is no reason, however, why one man should not own a hundred small farms, rented out by him to cultivators, instead of a single large farm. Progressive land taxation would therefore not necessarily result in the

development of a class of small independent farmers or peasant proprietors. Small farms do not imply small independent farmers; they may mean small tenants or farm hands of a large farmer or a large landed proprietor. However, in the case of city real estate, where the chief complaints against the unearned increment are urged, there is but little doubt that large landowners would distribute their holdings. The net economic result of a progressive property tax levied on the land, instead of on the landowner, would thus be in the first place a change in the constitution of land fortunes rather than in their extent; and in the second place a probable diminution in the capacity of the country to compete in the markets of the world. But the fiscal results would be insignificant. Ultimately the tax would tend to be levied only on the lowest class. For no plot would now exceed in size the smallest area on which the lowest rate is assessed. In other words, the progressive tax would virtually turn out to be a proportional tax. A progressive tax on land is not necessarily a progressive tax on the landowner.

Considering, therefore, these four objections, it is plain that until a complete change is made in our system of the general property tax, it would be useless and worse than useless to introduce the progressive principle. We should be jumping from the frying pan into the fire.

§ 2. *The Income Tax.*

We come next to the income tax. The income tax in the United States was until recently not a practical question. The few existing income taxes in our American commonwealths are even more farcical in their administration than the general property tax. It is utterly idle to suppose that the latter will be supplanted by the former, or that any better results could be obtained by attempting to assess a man directly on his income rather than on his property. For some kinds of property at all events are tangible, while the income even from tangible property is frequently more or less uncertain and inscrutable. At the same time recent events have shown that a federal income tax, either as a war measure, or as a tax supplementary to the existing sources of revenue, is within the range of practical politics. In this case it would perhaps seem that the progressive principle might not illogically be applied in the future, as it has been in the past. We might base the demand, so it might be urged, not only on the general economic theory of faculty, but also on the special compensatory theory. For, as we know, one need have no socialistic leanings to advocate the special compensatory theory. It will be remembered that Secretary Fessenden advocated the progressive income tax during the Civil War on the faculty theory,¹ while on the European continent it is generally upheld on the special compensatory theory. The practicability of a graduated scale, however, depends to some extent on the methods of assessment and the extent of foreign investments. Where a large part of the income received by the citizens is derived

¹ See above, p. 102.

from capital invested abroad, not only will the ascertainment of income be more difficult, but all the possible complexities of a double taxation will be introduced. Where, on the other hand, the income is derived chiefly from home sources, the problem will be simpler. From this point of view a progressive income tax would probably be attended with more difficulties in England than it would be in many other countries whose holdings in foreign investments are less extensive.

A far more important consideration, however, is the actual form of the income tax itself. This is evidently not the proper place to discuss the details of income taxation. It may be well, however, to recall the fact that there are two chief methods of assessing an income tax. The one method as exemplified in the most successful of all income taxes—the English—is to split the income into schedules, according to the source from which it is derived, each schedule or set of schedules being assessed separately by different officials. This may be termed the schedule or stoppage-at-source income tax. The other method, as in the Prussian tax and the American taxes during the Civil War, is to assess the income as a whole in a lump sum and to levy the tax directly on the income receiver, instead of in the first instance on the income payer. This may be called the lump-sum income tax. It is what the French call *l'impôt global*.² Experience has shown that the schedule tax is far preferable to the lump-sum tax. England after experimenting with the latter long since abandoned it for the former. Yet it is plain that the progressive rate is very much more difficult of application to the schedule, than to the lump-sum, in-

² The British income tax committee of 1906 calls it the system of "direct personal assessment" as opposed to the "system of collection at the source."

come tax. If an income is derived in equal proportions from each of, let us say, five sources or schedules, it would pay much less than an equal income derived wholly from any one source. Let us assume that the progressive scale is so arranged that the rate is fixed at two per cent for \$10,000, and that it increases one per cent for each successive \$10,000. A has an income of \$50,000 derived equally from each of five sources. He will pay the normal rate, or two per cent, on each schedule; that is, his tax will be five times \$200 or a total of \$1,000. B has the same income which happens to be derived entirely from one source or schedule. He must pay six per cent on \$50,000 or a total of \$3,000. An ostensible progression of rates would thus result in the same amounts of income paying very different amounts of tax. Such an inequality would be intolerable.

We are thus reduced to the dilemma: A progressive income tax corresponds to the demands of ideal justice; but a lump-sum income tax, at least in Anglo-Saxon countries, is in practice more or less of a failure; and a schedule income tax is not susceptible of graduation. The desirable, therefore, is not practicable; that is, it is practically undesirable. In other words, a really successful progressive income tax is an infeasibility.

The British Select Committee of 1906 seeks to circumvent the difficulty by the ingenious expedient of what it calls a "super-tax." On the one hand the Committee is quite resolute in its determination not to abandon the stoppage-at-source features of the tax, stating that "direct personal assessment for the whole tax is not practicable in this country in the sense of being an expedient or desirable means of collecting revenue." On the other hand, however, it regards favorably the plan of imposing "a

second tax, distinct and supplementary to the existing tax, to be levied on investments by direct personal assessment." This, which is called the "super-tax," is to be assessed only on persons with incomes over £5,000, and may, if desired, be graduated. The Committee recognizes that this new tax is open to the objections that may be urged against any lump-sum income-tax scheme. It thinks, however, that the interests of the exchequer will be protected by the retention of the stoppage-at-source feature.⁸ It believes, furthermore, that the dangers of evasion will gradually be reduced to manageable proportions.⁴ The

⁸"It will be seen that this is a combination of the method of a direct personal tax with that of taxation at the source. That portion of the tax which is new and additional would be a direct personal tax, and some of the objections which have already been urged against the adoption of a direct personal tax in place of the system of collection at the source apply to this proposal. They are modified, however, to the extent that the tax which is now collected at the source would continue to be so collected, and consequently there would be no loss of revenue there as the result of failure to obtain full disclosure for the direct personal tax." *Report from the Select Committee on Income Tax, 1906*, sec. 8, p. 4.

⁴"This proposal, in common with all proposals for direct personal assessment of the whole income, requires that a full statement of individual net income should be obtained from all persons upon whom the super-tax would be levied. It is true that, at the present time, about 700,000 persons do make a declaration of the amount of their net annual income. They are people with a total net income not exceeding £700 a year, and they make the declaration in order to obtain the abatement which the law allows upon such incomes. But it does not follow that other people with much larger and more complicated incomes would be equally willing to declare their actual income, when the object for which the declaration was required was that an additional tax should be levied upon them. It is one thing to require that information must be given before taxation can be reduced. To demand the information with a view to increasing the taxation of those who supply it is totally different.

The difficulty of discovering who had an income of £5,000 a year or more and ought to make a return has been insisted upon by several of the official witnesses. But we think that the difficulties have been exaggerated. In most parts of the country the surveyors

Committee concludes that while the system of graduation through the imposition of a super-tax is practicable it offers some disadvantages and difficulties which have here been pointed out.⁵ Whether the difficulties can be overcome will be watched with interest when the scheme itself is adopted, as it probably will be before long, by Parliament.

In the American income tax of 1894, which was soon declared unconstitutional, the system was essentially the undesirable and discredited lump-sum of personal-income plan. In one point, however, the stoppage-at-source idea was introduced. Corporations were directed to pay the income tax on stock and bonds, and to withhold the amount of the tax from dividends or interest. Had a progressive tax been imposed, it would have been necessary to levy the highest rate on all dividends or coupons. For if the lowest rate were levied on, let us say, \$10,000, it is plain that every one would split his corporate holdings into blocks of \$10,000, and invest each of these in a different corporation or assign interest in his holdings to dummies or obscure relatives. If, on the other hand, the highest rate were levied on all corporate holdings, it would lead to crying injustice unless individuals were allowed a rebate amounting to the difference between the highest and the lowest rate, whenever they could swear that their entire income fell within the limit at which the lowest rate was imposed. As soon as such an oath, however, was permitted the whole advantage of assessing incomes at the source would disappear, and the door would be opened to all frauds inseparable from a personal or

of taxes would probably know who are likely to be enjoying large incomes. There would also, no doubt, be difficulty in checking the accuracy of the declarations. Here again, time would be required." *Report from the Select Committee, etc., page 4, sections 9 and 10.*

⁵ *Op. cit.*, paragraph 11.

lump-sum income tax. The whole machinery of assessing the tax to the corporation in the first instance might as well have been abandoned. Congress accordingly acted correctly in refusing to accept the proposed amendment in favor of a progressive scale. The serious mistake,—not to mention minor points like the exaggerated minimum of exemption,—was the adoption of the personal lump-sum scheme instead of the scheduled or stoppage-at-source plan. That is a point, however, which does not directly affect the present discussion.

Our decision must therefore be adverse to the application of the progressive scale to income taxes under actual administrative conditions in the United States. The advantages of graduation turn out on closer inspection to be illusory.

§ 3. *The Corporation Tax.*

In regard to the corporation tax the progressive, or rather the degressive, principle has already been applied in some of our commonwealths.¹ From one point of view these progressive rates may indeed be defended. The larger the earning capacity of the corporation, the more valuable are the privileges received from the state and the greater are its chances of successful competition with smaller rivals. This implies the production side of faculty. It is highly questionable, however, whether the more important consumption side of the faculty theory is applicable to corporations. A corporation is nothing but a fictitious entity, a juristic personality. It has no wants, no desires of varying urgency. We cannot properly predicate of it any equality or inequality of sacrifice. When the state taxes the corporation, it really seeks to tax the owners of the corporation, that is, the bondholders as well as the shareholders. It is not the corporations as such, but the individuals whose capital is invested in the corporation, who are the real taxpayers. When we speak of the principle of equality of taxation, we ordinarily mean equality as between individuals. A corporation is simply an association of individuals, to each of whom the fiscal test of equality must be applied. This is evident from the fact that the tendency in all those states which endeavor to avoid double taxation is to exempt from the personal property tax the shareholders of corporations which are already taxed on their capital stock.²

¹ See above, pp. 111, 112.

² See the chapter entitled "The Taxation of Corporations" in Seligman, *Essays in Taxation*, and especially Francis Walker, *Double Taxation in the United States*, in *Columbia Studies in History, Economics and Public Law*, vol. v, no. 1, 1895.

There is no necessary connection between the total earnings of a corporation and the total earnings of a shareholder. In the first place the small corporation may be owned by a few shareholders, while the stock of the large or more successful corporation may be distributed among hundreds or thousands of individuals. A progressive rate on the larger or more successful corporation might then involve an actually regressive rate on the shareholders. The rich stockholder in the small road would pay not more, but less, in proportion than the poor stockholder in the large road.

Secondly, even assuming that the stockholders have equal shares in the two roads, we know nothing about their other sources of income. If all income were derived from corporate property alone, the matter would indeed be simple. In the existing complexity of industrial relations, however, the revenue from corporate holdings may constitute the entire subsistence of one man, and an insignificant fraction of the total income of his neighbor. The faculty theory of taxation, especially from the consumption side, can be predicated only of the entire income of an individual. A progressive tax on larger corporations, then, is quite as likely to be a regressive rate on the particular stockholder. Instead of having progression we should have "upside-down" progression. Only on the assumption that the progressive rate is applied to all incomes and to all other forms of property as well as to corporate income or property, would this objection be removed. Even then, however, the force of the first objection would not be diminished. Moreover, when we bear in mind the complications introduced by the facts of double taxation, due to the lack of harmony in our various commonwealth laws, the difficulties will be sensibly increased.

A progressive corporation tax, then, does not neces-

sarily mean a progressive tax on the individual shareholders, and still less does it imply a progressive tax on the individual bondholders. It may denote just the reverse. The application of the progressive principle to corporations is therefore of dubious expediency.

§ 4. *The Inheritance Tax.*

The case is quite different, however, with the inheritance tax, a term commonly applied not only to inheritances proper, but to successions of any kind, whether by gift, devise, bequest, or devolution in general. The two most significant developments in recent American finance are the growth of the inheritance tax and the extension of the corporation tax. In some commonwealths the entire state revenue bids fair soon to be derived from these two sources alone, thus greatly simplifying many of our perplexing problems. The clamor for a progressive rate in the inheritance tax is constantly growing in the United States, and we have repeated examples of graduated succession duties.¹ It has already been noted that writers like John Stuart Mill, who are most conservative in their opposition to progressive taxation in general, nevertheless uphold the progressive principle in the case of inheritance taxes.

There are three arguments on which it is possible to base progressive inheritance taxes. The first argument is that which rests on the limitation-of-inheritance theory. The tax is regarded by some merely as a limitation upon the legal privilege of inheritance imposed by the state in the public interest; with the further qualification that it is the duty of the state to check the growth of inordinately large fortunes and to favor the diffusion of wealth. The progressive principle would be the most convenient way of attaining this result.

This argument, however, is not entirely beyond question. For even if we adopt the theory that the tax is to be

¹ For an exhaustive discussion of the inheritance tax, see Max West, *The Inheritance Tax*, in *Columbia University Studies in History, Economics and Public Law*, iv, no. 2, 2nd ed., 1908.

arded as the exercise of the state's power to regulate the privilege of inheritance, it does not follow that the state is under any obligation to redress existing inequalities in fortune. The state has, indeed, the right and the power to put all on an equal plane of competition, and, with this end in view, it may enact laws which, although they seemingly restrict individual action, actually confer upon the members of society a wider and more real liberty. This is a very different thing, however, from settling upon an arbitrary limit beyond which the amassing of wealth is to become illegal, and from using the expedient of the progressive scale in order to attain this end. The whole question, however, depends on the limits that we assign to the family idea of property. As Dr. West has well pointed out, the right of inheritance within the family is already greatly restricted by the freedom of bequest, while on the other hand inheritance and bequest are not very far from being natural rights, but are not even necessarily consequences of the rights of private property.

The second argument is that which we have learned to know as the economic argument. This is more convincing, because it is based on a sounder theory of the inheritance tax itself. According to this view, an inheritance, using the word in the wider sense, is simply a gratuitous income, a chance accretion to property, which impairs the faculty of the individual and which, just because of its accidental or unearned nature, is a most fitting subject of taxation. For since income connotes a regular periodical revenue the inheritance would normally be affected by an income tax;² and since the general

The income tax section of the tariff bill as passed by the House of Representatives in January, 1894, curiously enough contained a clause by virtue of which inheritances and successions were to be considered a part of the annual income. This would have tended to create much confusion.

property tax is ineffective in its operation, the taxation of inheritances constitutes the best method of reaching the property, even if it is reached only once. All the considerations already urged, which apply to the progressive taxation of faculty, whether we find the test of faculty to consist in income or in property, apply with equal force to the inheritance tax. From the standpoint both of production and of consumption, true equality in taxable faculty means progressive taxation of inheritances. Moreover, scarcely any of the objections which attach to the progressive rate in the general property tax applies here.

The third argument is what we have termed the special compensatory argument. This alone would suffice even if the other arguments were inadequate. For even granting that proportion is the ideal to be kept in view, it may be said with some measure of truth that our existing taxes fall with less severity on the wealthier classes. Not only are many of our indirect taxes regressive in their nature, but the general property tax, in its practical operation, is scarcely less objectionable in this respect. A progressive rate in the succession duties, especially where personality is concerned, would simply tend to reestablish the desired proportionality. Advocates of general proportional taxation in theory might, therefore, uphold progressive inheritance taxes in practice.

Perhaps the most vigorous defense of the progressive principle is to be found in a recent official report which shows so clearly the present temper of the American people that we venture to make a liberal extract:

"Whatever the economic theory upon which we may support the idea of an inheritance tax at all—whether we believe in the theory that the state is entitled to a share in the estate of a decedent for the reason that it surrenders its right to take the whole estate to itself, or for the reason that it supplies the means and protection by means of which the deceased can distribute his property, or whether we adhere to the back-tax theory, or to the diffusion-of-wealth theory, or to the

accidental-income theory—we all agree that it is not unreasonable that a larger percentage of a large fortune should be paid to the state than of a small one. The man who saves a little can, if he sees fit to do so, keep it in ordinary circumstances about him and distribute it virtually in person among those whom he wishes to have it after his death; but one of our modern enormous fortunes must almost necessarily be invested far and wide in enterprises of every description, with branches all over the country. The possessor of such a fortune has never seen most of it; it is represented to him, in a large part, by a safe deposit box full of certificates of stock, bonds, contracts, mortgages, etc. The whole power of the state is essential not only to guard and to protect his interests, but to distribute them after his death. More than that, it was the state itself by its laws granting to individuals of great ability and force free sway to exercise their powers and to make them productive, which gave them scope and opportunity to accomplish the enormous results which we see to-day. While it is true, therefore, that ability and vigor were necessary to accomplish the end, the great results achieved could never have been attained without the active assistance and protection of the state; and this assistance and protection are more necessary to the amassing of a great fortune than of a small one.

This conception of the social aspects of private wealth has made great strides in recent years and is now recognized by not a few of our wealthy citizens themselves. Mr. Andrew Carnegie, in a recent and striking speech at a meeting of the National Civic Federation, in New York in December, 1906, said, after describing the growth of many of the large fortunes of the country: 'Now, who made that growth? The growth of the American Republic—that is where that wealth came from and that is the partner in every enterprise where money is made honorably; it is the people of the United States. . . . I say the community fails in its duty and our legislators fail in their duty if they do not exact a tremendous share, a progressive share.'

It is largely for some such reasons that it seems to your Commissioners that a great fortune may well be expected to contribute a greater percentage to the state when it passes to others than a small one. Your Commissioners believe that a graduated inheritance tax is defensible, not so much on the ground that large fortunes are a menace to the public, as on the theory that the ability to contribute to the support of government grows more rapidly than the amount of the fortune or the size of the estate."⁸

⁸ *Report of the Special Tax Commission of the State of New York, 1907, pp. 10-12.*

§ 5. *Other Taxes—Conclusion.*

As we have learned above, there are other taxes to which the principle of progression might be applied. The ultimate form which taxation in America is to assume is already discernible. National revenues in the future, as to a great extent in the past, will be derived from a well considered system of indirect taxes, possibly supplemented at intervals by some form of a constitutional income tax. State revenues will be derived almost exclusively from corporation taxes and inheritance taxes; while real estate will be relegated to the local divisions. The one difficult point will still be the complete taxation of individual faculty. The taxation of intangible personalty has always been a failure; a direct tax on income would not succeed a whit better. Yet the question will continually revert as to how it will be possible to reach the entire individual faculty. The real estate tax indeed will reach one portion of this faculty, the corporation tax generalized and corrected will reach another large portion, and the inheritance tax will greatly lessen the inequality resulting from the non-taxation of other elements of faculty. The gap, however, will not be entirely filled and it can be removed only by some forms of taxation which will indirectly and roughly it is true, but none the less surely, reach those earnings which are derived neither from land nor from corporate holdings. Such earnings are chiefly those from business and from personal exertions. It is highly probable, therefore, that the future system, based upon complete interstate comity and the avoidance of double taxation, will include some attempt to reach these earnings either through a taxation of rentals, both business and private, like that existing in

France, Canada and Australia, or through a more skillfully devised mode of business taxation. When these supplementary forms of taxation are created, to replace, in good part, our unworkable tax on intangible personality, it may be found that both the economic and the special compensatory theories will serve as the bases of a moderately progressive system. But in the latter tax especially, the graduation may be more ostensible than real, because of the very rough approximation to actual taxable capacity.

The general conclusion of our investigation may now be put in summary form. It is to the effect that while progression of some sort is demanded from the standpoint of ideal justice, the practical difficulties in the way of its general application are well nigh insuperable. Progression is defensible only on the theory that the taxes are so arranged as to strike every individual on his real income. In default of a single tax on incomes, however, which is visionary, practicable tax systems can reach individual incomes only in an exceedingly rough and round-about way. Under such practical conditions it is doubtful whether greater individual justice will be attained by a system of progression than by the simple rule of proportion; and it is highly questionable whether the ideal advantages of progression would not be outweighed by its practical shortcomings. For the United States at all events, the only important tax to which the progressive scale is at all applicable at present is the inheritance tax. For the future development of the idea we must rely on an improvement in the tax administration, on a more harmonious method of correlating the public revenues and on a decided growth in the alacrity of individuals to contribute their due share to the common burdens.

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